HITACHI

36" PC READY COLOR TV

36SDX88B

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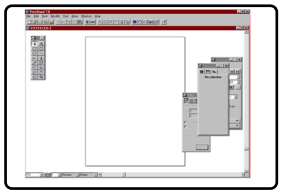

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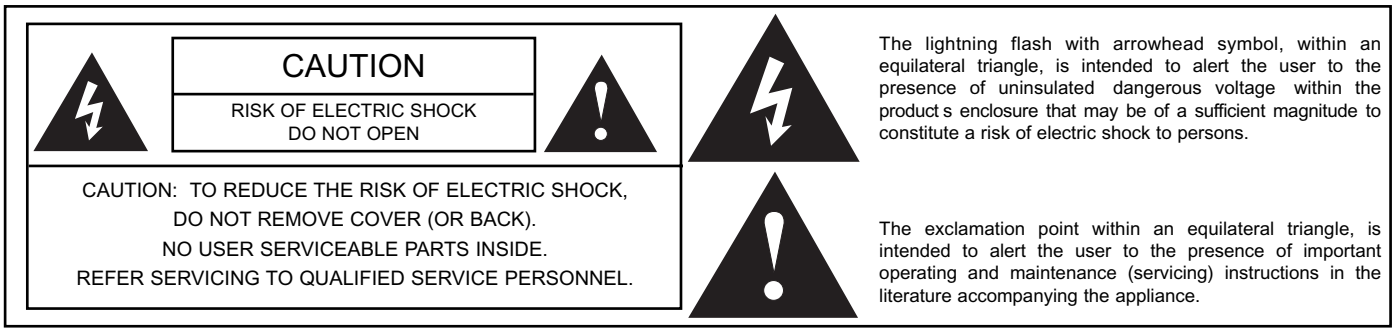
IMPORTANT

Follow all warnings and instructions marked on this PC ready color television receiver.



WARNING:
TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS PC READY COLOR TELEVISION SYSTEM TO RAIN OR MOISTURE.

NOTE: ¥There are no user serviceable parts inside the receiver.
¥Model and serial numbers are indicated on back side of the set.

CAUTION: ¥ Adjust only those controls that are covered in the instructions, as improper changes or modifications not expressly approved by HITACHI could void the user s authority to operate the PC ready color TV.

POWER SOURCE

This HITACHI PC READY COLOR TV is designed to operate on 120 Volts/60Hz, AC household current. Insert power cord into a 120 Volts/60Hz outlet.

TO PREVENT ELECTRIC SHOCK, DO NOT USE THE PC READY COLOR TELEVISION S PLUG WITH AN EXTENSION CORD, RECEPTACLE, OR OTHER OUTLET UNLESS THE BLADES AND GROUND TERMINAL CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

NEVER CONNECT THE PC ready color TV to 50Hz, DIRECT CURRENT, OR ANYTHING OTHER THAN THE SPECIFIED VOLTAGE.

NOTE: This PC ready color television receiver will display television closed captioning, (CC or), in accordance with paragraph 15.119 of the FCC rules.

CAUTION: Never remove the back cover of the PC ready color television set as this can expose you to very high voltages and other hazards. If the set does not operate properly, unplug the set and call your dealer or service shop.

IMPORTANT SAFEGUARDS

CAUTION:

- ¥ Read all of these instructions.
- ¥ Save these instructions for later use.
- ¥ Follow all warnings and instructions marked on the PC ready color television receiver.

SAFETY POINTS YOU SHOULD KNOW ABOUT
YOUR HITACHI PC READY COLOR TELEVISION RECEIVER

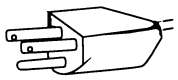
Our reputation has been built on the quality, performance, and ease of service of HITACHI PC ready color television receivers.

Safety is also foremost in our minds in the design of these units. To help you operate these products properly, this section illustrates safety tips which will be of benefit to you. Please read it carefully and apply the knowledge you obtain from it to the proper operation of your HITACHI PC ready color television receiver.

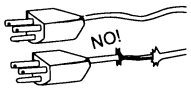
Please fill out your warranty card and mail it to HITACHI. This will enable HITACHI to notify you promptly in the improbable event that a safety problem should be discovered in your product model.

FOR YOUR PERSONAL SAFETY

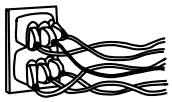
1. This PC ready color television set is equipped with a three-prong grounded, alternating-current line plug.This plug will fit only three terminal receptacles. This is a safety feature. Do not defeat the safety purpose of the three terminal plug.



2. When the power cord or plug is damaged or frayed, unplug the PC ready color television set from the wall outlet and refer servicing to qualified service personnel.



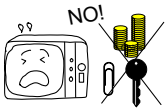
3. Do not overload wall outlets and extension cords as this can result in fire or electric shock.



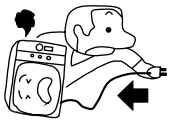
4. Do not allow anything to rest on or roll over the power cord, and do not place the PC ready color TV where the power cord is subject to traffic or abuse. This may result in a shock or fire hazard.

5. Do not attempt to service the PC ready color television set yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

6. Never push objects of any kind into the PC ready color television s cabinet slots as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the PC ready color television set.



7. If the PC ready color television set has been dropped or the cabinet has been damaged, unplug the PC ready color television set from the wall outlet and refer servicing to qualified service personnel.



8. If liquid has been spilled into the PC ready color television set, unplug it from the wall outlet and refer service to qualified service personnel.

9. Do not subject your PC ready color television set to impact of any kind. Be careful not to damage the picture tube surface.

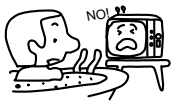
10. Unplug the PC ready color television set from the wall outlet before cleaning. Use a damp cloth for cleaning. Do not use liquid or aerosol cleaners.

11-1. Do not place the PC ready color television set on an unstable cart, stand, or table. The PC ready color television set may fall, causing serious injury to a child or an adult, and serious damage to the appliance. Use only with a cart or stand recommended by the manufacturer, or sold with the PC ready color television set. Wall or shelf mounting should follow the manufacturer s instructions, and should use a mounting kit approved by the manufacturer.

11-2. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

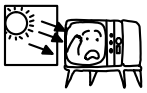
PROTECTION AND LOCATION OF YOUR SET

12. Do not use the PC ready color television set near water, for example, near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc.

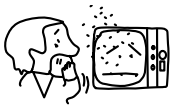


¥ Never expose the set to rain or water. If the set has been exposed to rain or water, unplug set from wall outlet and refer to qualified service personnel.

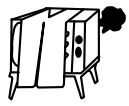
13. Choose a place where light (artificial or sunlight) does not shine directly on the screen.



14. Avoid dusty places, since accumulated dust inside the chassis may cause failure of the set when high humidity persists.



15. The set has slots or openings in the cabinet for ventilation purposes which provide reliable operation of the receiver and protect the PC ready color TV from overheating. These openings must not be blocked or covered.



¥ Never cover the slots or openings with cloth or other material.

¥ Never block the bottom ventilation slots of the set by placing it on a bed, sofa, rug, etc.

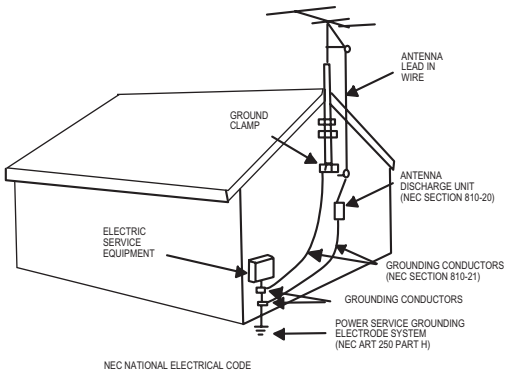
¥ Never place the set near or over a radiator or heat register.

¥ Never place the set in a built-in enclosure, unless proper ventilation is provided.

IMPORTANT

PROTECTION AND LOCATION OF YOUR SET

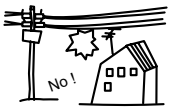
16-1. If an outside antenna is connected to the PC ready color television set, be sure the antenna system is grounded so as to provide some protection against voltage surges and built up static charges, Section 810 of the National Electrical Code, NFPA No. 70-1975, provides information with respect to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit connection to grounding electrode, and requirements for the grounding electrode.



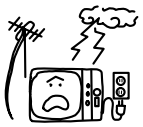
EXAMPLE OF ANTENNA GROUNDING AS PER NATIONAL ELECTRICAL CODE INSTRUCTIONS.

16-2. **Note to CATV system installer:**
(Only for PC ready color television sets with CATV reception) This reminder is provided to call CATV system installers attention to Article 820-40 of the NEC that provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building, as close to the point of cable entry as practical.

17. An outside antenna system should not be located in the vicinity of overhead power lines or other electrical lights or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

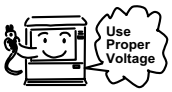


18. For added protection for the PC ready color television set during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna. This will prevent damage due to lightning and power-line surges.



OPERATION OF YOUR SET

19. The PC ready color television set should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply at your home, consult your television dealer or local power company. For sets designed to operate from battery power, refer to the operating instructions.



20. If the PC ready color television set does not operate normally by following the operating instructions, unplug the PC ready color television set from the wall outlet and refer servicing to qualified service personnel. Adjust only those controls that are covered in the operating instructions as improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the PC ready color television set to normal operation.

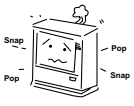
21. If your PC ready color television set is to remain unused for a period of time, (such as when going on a holiday), turn the PC ready color television set OFF and unplug it from the wall outlet.

IF THE SET DOES NOT OPERATE PROPERLY

22. If you are unable to restore normal operation by following the detailed procedure in your operating instructions, do not attempt any further adjustments. Unplug the set and call your dealer or service technician.

23. Whenever the PC ready color television set is damaged or fails, or if there is a distinct change in performance that indicates a need for service, unplug the set and have it checked by a professional service technician.

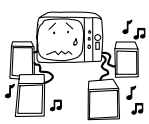
24. It is normal for some PC ready color television sets to make occasional snapping or popping sounds, particularly when being turned on or off. If the snapping or popping is continuous or frequent, unplug the set and consult your dealer or service technician.



FOR SERVICING AND MODIFICATION

25. Do not use attachments not recommended by the PC ready color television set manufacturer as they may cause hazards.

26. When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.



27. Upon completion of any service or repairs to the PC ready color television set, ask the service technician to perform routine safety checks to determine that the PC ready color television is in safe operating condition.

WARNING

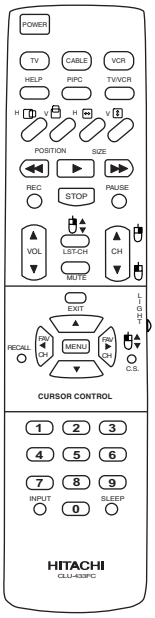
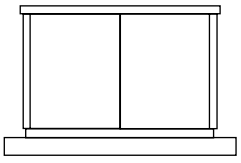
Continuous On-Screen Displays such as video games, stock market quotations, computer generated graphics, and other fixed (non-moving) patterns can cause permanent damage to PC Ready Color Television Receivers. Such PATTERN BURNS constitute misuse and are NOT COVERED by your HITACHI Factory Warranty.

This PC ready color television receiver was intended mainly for the private viewing of programs broadcast by TV stations, cable companies, and programs from other video sources. Public viewing may require prior authorization from the broadcaster or owner of the video program.

ACCESSORIES

Check that you have the following accessories before disposing of the packing material.
1. Remote Control Unit.
2. Two AA size, 1.5V batteries (For Remote Control Unit).

For information regarding how to obtain these accessories, please call TOLL FREE 1-800-448-2244 for your nearest HITACHI Authorized Parts Distributor in the continental United States. For Alaska please contact your nearest HITACHI regional office.

PARTNAME	PARTNO.	ILLUSTRATION
36SDX88B CLU-433FC REMOTE CONTROL	HL00724	
36V PC READY COLOR TELEVISION STAND SP351B or SP364B (Not included, order separately)	H530024	 CUSTOM HITACHI PC READY COLOR TELEVISION STAND Excellent for VCR and videotape storage. Special features include curved smoke glass doors and an adjustable shelf. Available in black.

CAUTION: PC ready color television stand model SP351B or SP364B is designed for use only with a 36 inch or smaller PC ready color television set. Use of a smaller stand, a non Hitachi recommended stand or a generic stand may result in instability, causing possible injury.

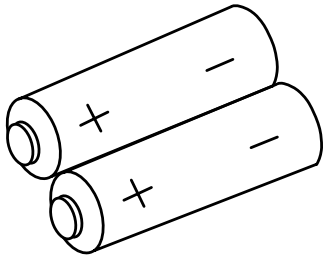
REMOTE CONTROL BATTERY INSTALLATION AND REPLACEMENT

1. Open the battery cover of the remote control by pushing the notched part of the cover with your fingers.

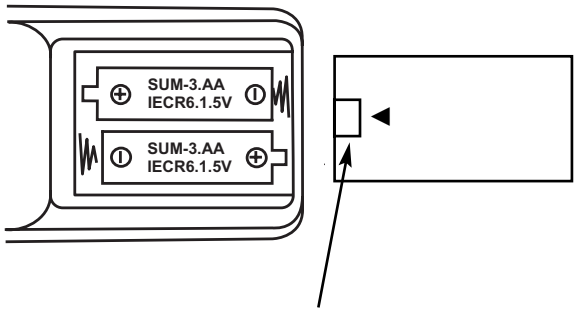
2. Insert two new AA size batteries in the remote. When replacing old batteries, push them towards the springs and lift them out.

3. Match the batteries to the (+) and (-) marks in the battery compartment.

4. Replace the cover.



BOTTOM VIEW



Lift up on tab to remove back cover.

CAUTIONS

1. If your PC ready color television set is to remain unused for a long period of time, for instance when you go on vacation, unplug the PC ready color television from the wall outlet.

2. Do not subject the remote control to shocks such as dropping it on the floor, etc. Precision parts may be damaged.

3. Do not allow the remote control to become wet and avoid placing it in areas of high humidity. Do not leave it on or near a heater. Excess heat or moisture may cause the unit to cease operation.

4. If the batteries become exhausted, remote control operation may become erratic or stop altogether. Replace the old batteries with new AA types.

ANTENNA

Unless your PC ready color TV is connected to a cable TV system or to a centralized antenna system, a good outdoor color TV antenna is recommended for best performance. However, if you are located in an exceptionally good signal area that is free from interference and multiple image ghosts, an indoor antenna may be sufficient.

LOCATION

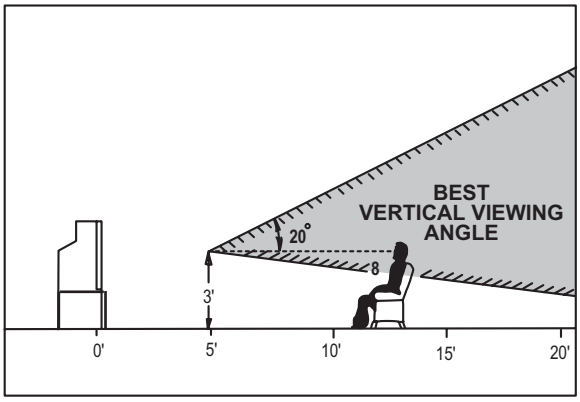
Select an area where sunlight or bright indoor illumination will not fall directly on the picture screen. Also, be sure that the location selected allows a free flow of air to and from the back cover of the set.
To avoid cabinet warping, cabinet color changes, and increased chance of set failure, do not place the PC ready color TV where temperatures can become excessively hot, for example, in direct sunlight or near a heating appliance, etc.

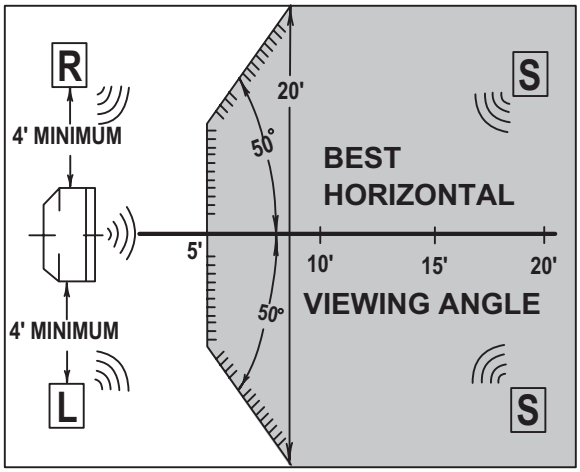
VIEWING

To view the PC ready color television screen at its best, test various locations in the room. The drawings below show several suggestions.

The best picture is seen by sitting directly in front of the PC ready color TV and about 6 to 9 feet from the screen. During daylight hours, reflections from outside light may appear on the screen. If so, drapes or screens can be used to reduce the reflection or the PC ready color TV can be located in a different section of the room.

If the PC ready color TV s audio output will be connected to a Hi-Fi system s external speakers, the best audio performance will be obtained by placing the speakers equidistant from each side of the receiver cabinet and as close as possible to the height of the picture screen center. For best stereo separation, place the external speakers at least 4 feet from the side of the PC ready color television. Place the surround speakers to the side or behind the viewing area. Differences in room sizes and acoustical environments will require some experimentation with speaker placement for best performance.

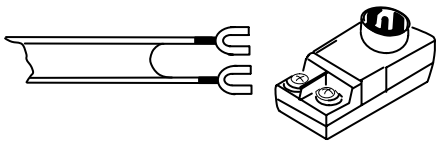




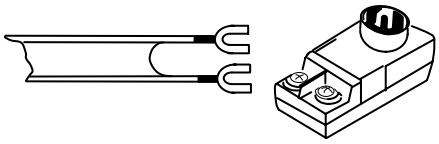
CAUTION: The magnetic field of external speakers may cause the picture to distort if the speakers are placed too close to the PC ready color television. Move the speakers away from the PC ready color TV until there is no picture distortion.

HOOKUP CABLES

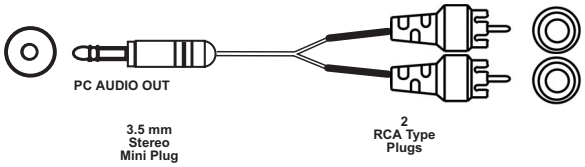
Most video/audio connections between components can be made with shielded video and audio cables that have phono connectors. For best performance, video cables should use 75-Ohm coaxial shielded wire. Cables can be purchased from most stores that sell audio/video products. Below are illustrations and names of common connectors. Before purchasing any cables, be sure of the output and input connector types required by the various components and the length of each cable.

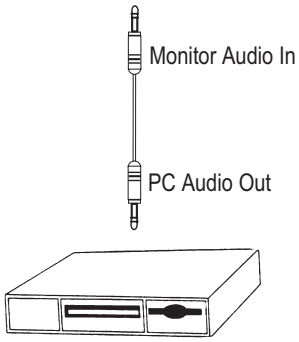


300-Ohm Twin Lead Connector
This outdoor antenna cable must be connected to an antenna adapter (300-Ohm to 75-Ohm).

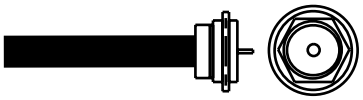


Phono Connector
Used on all standard video and audio cables which connect to inputs and outputs located on the PC ready color television s rear jack panel and front control panel.





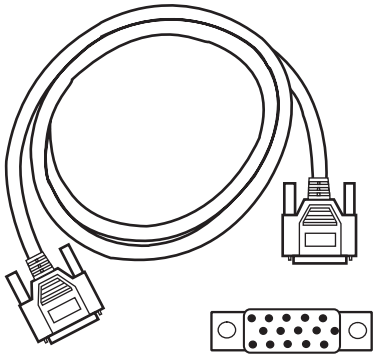
Stereo Cable (3.5 mm plug to 3.5 mm plug) (Optional)
This cable is used to connect from Audio out jack on the back of the computer s sound card to the PC Audio input Jack of the monitor.



F Type 75-Ohm Coaxial Antenna Connector
For connecting RF signals (antenna or cable TV) to the antenna jack on the television.

S-Video (Super Video) Connector
This connector is used on camcorders, VCRs and laser-disc players with an S-Video feature in place of the standard video cable to produce a high quality picture.

Mouse Connector Cable (Provided)
This cable is used to connect the computer mouse port to the TV/monitor mouse output for remote control mouse operation.



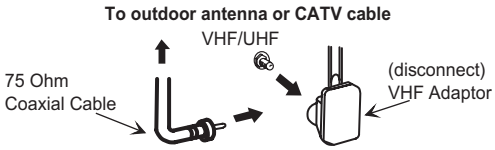
D-SUB MINI 15-Pin Cable (Optional)
This cable is used to connect a computer VGA output to the D-SUB input located on the rear panel.

ANTENNA CONNECTIONS

These sets are equipped with one VHF/UHF antenna terminal. The VHF/UHF terminal can be used for normal TV, cable TV (CATV), a TV game, etc.

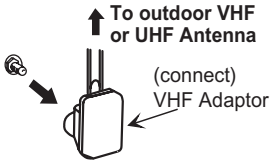
1. VHF (75-Ohm) antenna/CATV

When using a 75-Ohm coaxial cable system, disconnect the VHF adaptor from the VHF 75-Ohm receptacle and connect the outdoor antenna or CATV cable to a VHF 75-Ohm receptacle.



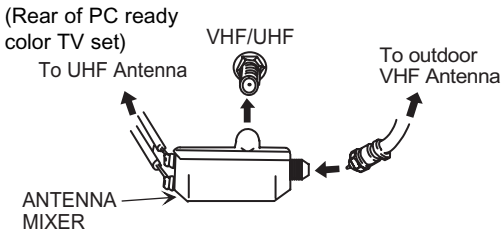
2. VHF (300-Ohm) antenna/UHF antenna

When using a 300-Ohm twin lead from an outdoor antenna disconnect the (VHF or UHF) indoor antenna leads from screws of the (VHF or UHF) adaptor and connect outdoor (VHF or UHF) leads to these screws of a (VHF or UHF) adaptor.



3. When both VHF and UHF antennas are connected

Attach an optional ANTENNA MIXER to the PC ready color TV antenna terminal and connect the cables to the ANTENNA MIXER.



Notes:

1. If an outdoor antenna/CATV is used, disconnect the indoor antenna. Ghosting and poor reception may result if both the indoor and outdoor antennas/ CATV are connected at the same time.
2. Consult your dealer or service store for the ANTENNA MIXER and (VHF or UHF) adaptor.
3. The special converter (decoder) will be supplied by the cable company.

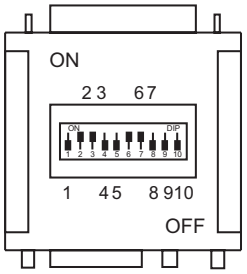
NOTE: Optional adapter for *Apple® Macintosh® computers. (*See page xx). If the optional AESP model G301/U Macintosh to VGA® adapter connector is configured and connected between Macintosh video out and the 36SDX88B video in, the Macintosh is forced to boot in 640 x 480/60 Hz or 800 x 600/60 Hz mode (set mode) because the operational adapter correctly manipulates the Macintosh sense pins.

For the optional adapter to work, it s DIP switch settings should be # 2, 3, 6, 7 = ON and # 1, 4, 5, 8, 9, 10 = OFF.

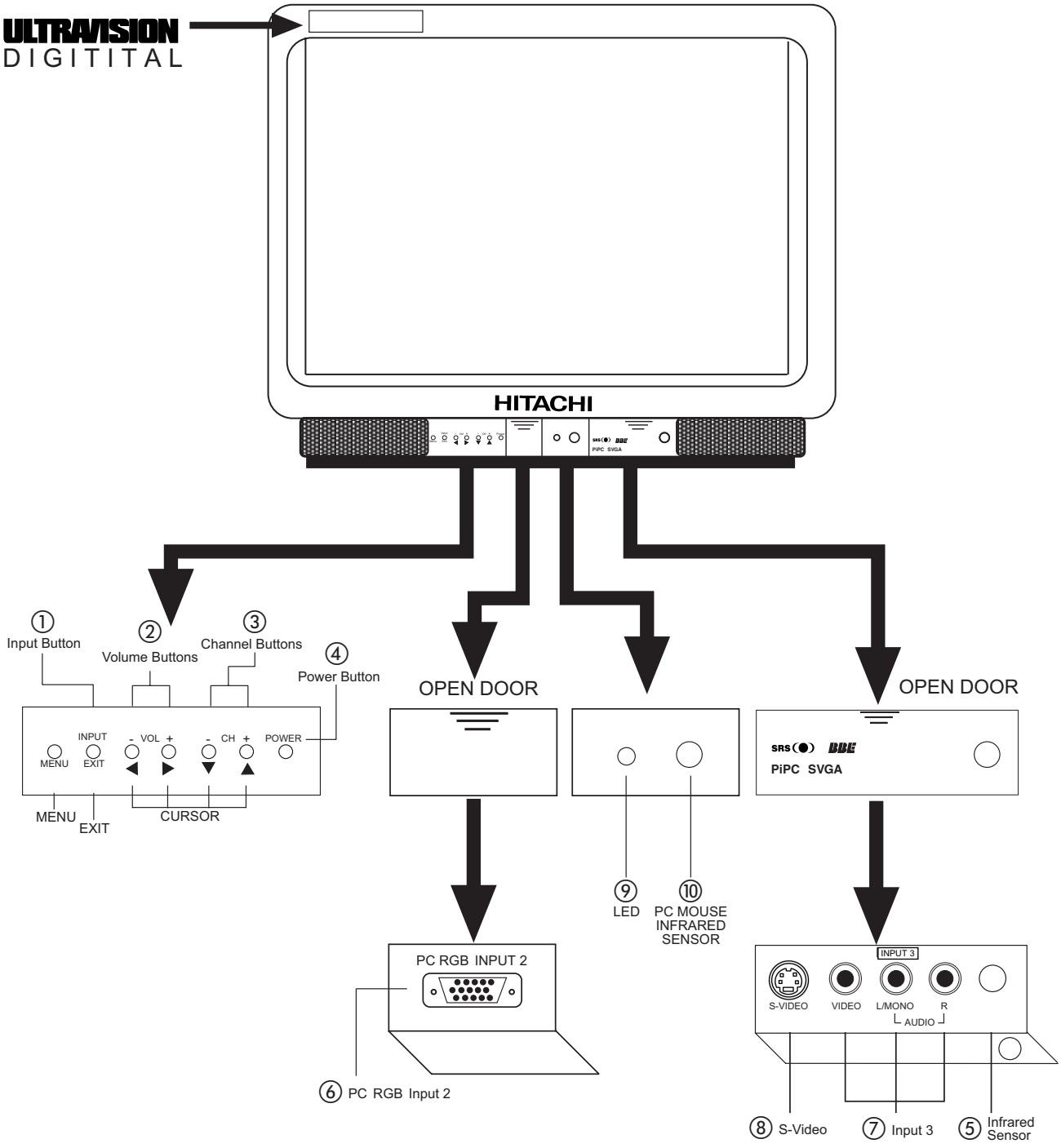
See below: Example - See Switch Instructions for details.

Mode 5 = 2367 (SVGA 800 x 600/60 Hz configuration)
(VGA 640 x480/60 Hz configuration)
Composite Separate Sync

SW1	SW2	SW3	SW4	SW5	SW6	SW7	SW8	SW9	SW10
	ON	ON			ON	ON			
OFF			OFF	OFF			OFF	OFF	OFF



FRONT VIEW



A detailed explanation of the circled numbers is on page 12.
See page 23 for MENU, CURSOR, and EXIT button operations.

FRONT PANEL CONTROLS

① **INPUT Button**
Press this button to select the antenna, VIDEO, or PC: RGB Input. Your selection is shown at the top right corner of the screen.

NOTE: S-Video input takes priority over Video input.

② **VOLUME Buttons**
Press these buttons for your desired sound level. The volume level will be displayed on the PC ready color TV screen.

③ **CHANNEL Buttons**
Press these buttons until the desired channel appears at the top right corner of the PC ready color TV screen.

④ **POWER Button**
Press this button to turn the PC ready color TV on or off.

NOTE: Your HITACHI PC ready color TV will appear to be turned OFF if there is no video input when VIDEO is selected. If you have no input to VIDEO, press the INPUT button until the normal broadcast picture appears. If the picture does not appear, the power is OFF.

⑤ **REMOTE CONTROL INFRARED Sensor**
Point your remote control at this area when selecting channels, adjusting volume, etc.

NOTE: Front panel control CURSOR operation will not operate the FAMILY FAVORITES channel function.

⑥ **PC RGB INPUT 2**
Use this 15 pin D-Sub input for a quick hook up from your PC connection. (RGB2)

⑦ **FRONT INPUT JACKS (for VIDEO: 3)**
Use these audio/video jacks for a quick hook-up from a camcorder or VCR to instantly view your favorite show or new recording. (Press the Input button until VIDEO: 3 appears in the top right corner of the PC ready color TV screen.)

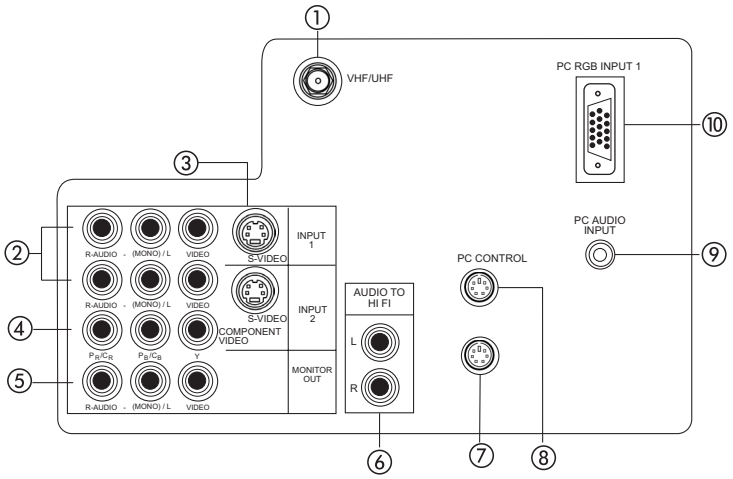
⑧ **S-VIDEO 3**
Input provides S-Video (super video) jacks for a quick hook-up of equipment with S-Video output capability.

⑨ **LED (Light Emitting Diode)**
Timing and Sync detector indicator.

⑩ **PC Mouse Remote Control Infrared Sensor**
Point your remote control at this area when using the handset remote control as the PC mouse. PC mouse and monitor connection must be wired prior to using PC mouse remote control. (See page 63)

REAR PANEL JACKS

REAR VIEW



① Antenna Inputs
The VHF/UHF terminal can be used for normal TV, cable TV (CATV), a video game, etc.

② Audio/Video Inputs 1,2
The INPUT button will step through each signal source input each time it is pressed. Use the audio and video inputs to connect external devices, such as VCRs, camcorders, laserdisc players,DVD players etc. (If you have mono sound, insert the audio cable into the left channel jack.)

③ S-Video 1,2
Input provides S-Video (Super Video) jacks for connecting equipment with S-Video output capability.

④ Component: Y-C_BC_R/Y-P_BP_R Input 2 (See Tips on Rear Panel Connections on page 14)
Input 2 provides Y-C_BC_R/Y-P_BP_R jacks for connecting equipment with this capability, such as a DVD player.

⑤ Monitor Out
These jacks provide fixed audio and video signals which are used for recording.
There is NO MONITOR OUT when using COMPONENT VIDEO.

⑥ Audio to Hi-Fi
These jacks provide variable audio output to a separate stereo amplifier. With this connection, the audio to the stereo can be controlled by the PC ready color television s main volume. Use these jacks for the SURROUND Left and Right channels. (see page 16 and 20)

⑦

NOTE:	The mini DIN 6 Pin Keyboard terminal underneath the PC Control at rear panel does not work on this model.

⑧ PC Control
Use this input for remote control mouse operation. (see page 63)

⑨ PC Audio Input
Connect external devices for audio in PC mode. (see page 63)

⑩ PC RGB Input 1 (RGB1)
Use this 15-pin D-Sub Input for your PC connection. (see page 60)

TIPS ON REAR PANEL CONNECTIONS

IMPORTANT: TURN OFF THE TV/PC MONITOR AND THE PC BEFORE CONNECTING OR DISCONNECTING ANY CABLES.

The S-Video connection is provided for high performance laserdisc players, VCRs etc., that have this feature. Use this connection in place of the standard video connection if your device has this feature.

If your device has only one audio output (mono sound), connect it to the left audio jack on the PC ready color TV.

Refer to the operating guide of your other electronic equipment for additional information on connecting your hookup cables.

A single VCR can be used for VCR #1 and VCR #2, but note that a VCR cannot record its own video or line output (INPUT: 1 in the example on page 15.) Refer to your VCR operating guide for more information on line input-output connections.

You may use VIDEO, S-VIDEO, or COMPONENT: Y-C_BC_R/Y-P_BP_R inputs to connect to Input 2, but note that only one of these may be used at a time.

Connect only 1 component to each input jack.

DO NOT connect standard VIDEO or S-VIDEO to Input 2 when using Y-C_BC_R/Y-P_BP_R input.

COMPONENT: Y-C_BC_R/Y-P_BP_R connections are provided for high performance components, such as DVD players. Use these connections in place of the standard video connection if your device has this feature.

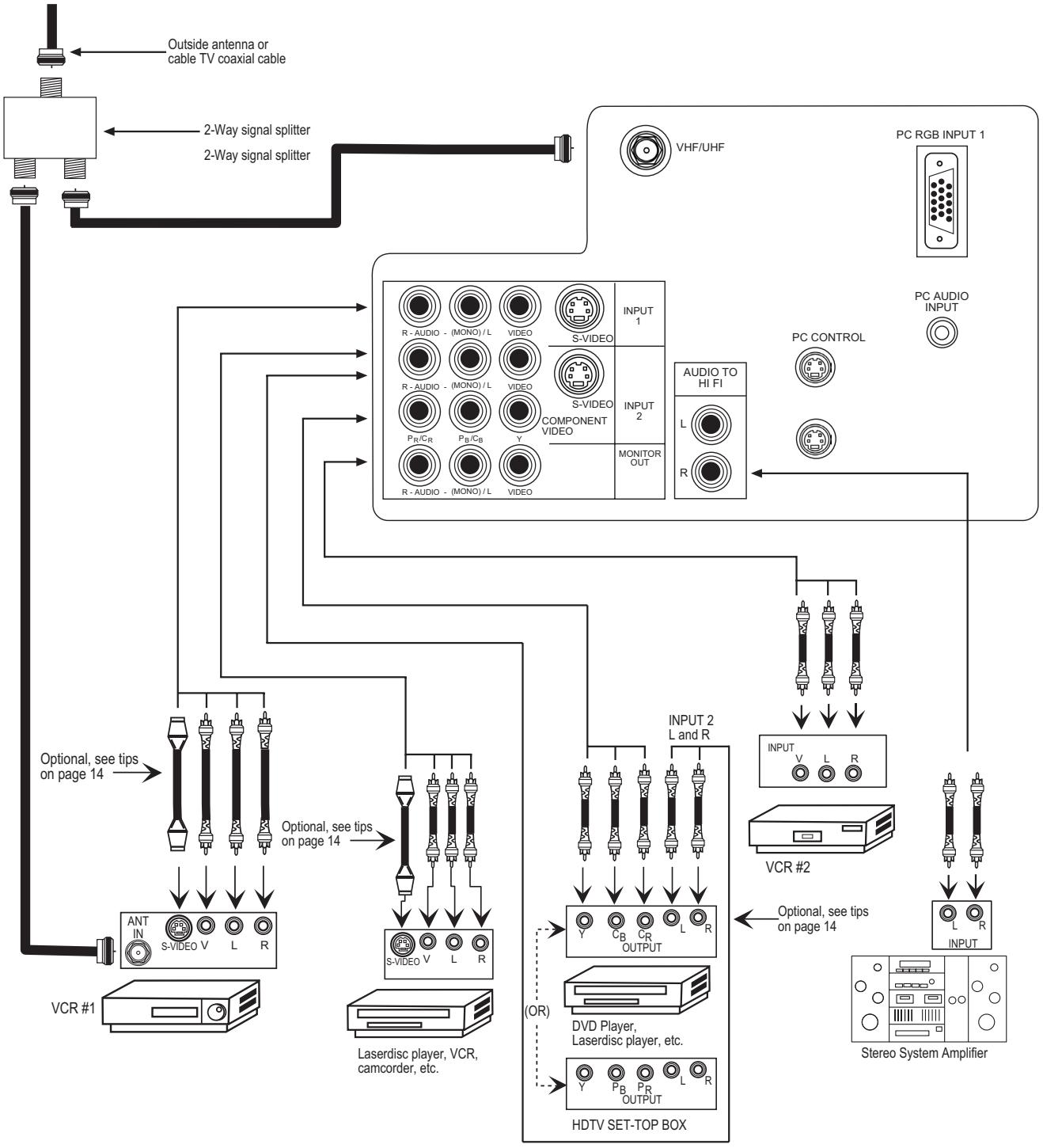
When using the Y-C_BC_R/Y-P_BP_R input jacks, connect your components audio output to the PC ready color TV s Input 2 Left and Right Audio input jacks.

Your component outputs may be labeled Y, B-Y, and R-Y. In this case, connect the components B-Y output to the PC ready color TV s C_B input and the components R-Y output to the PC ready color TV s C_R input.

It may be necessary to adjust TINT or turn AUTO COLOR-ON to obtain optimum picture quality when using the Y-C_BC_R/Y-P_BP_R inputs. (See page 48 and 49).

To ensure no copyright infringement, there is NO MONITOR OUT output when using the Y-C_BC_R/Y-P_BP_R jacks.

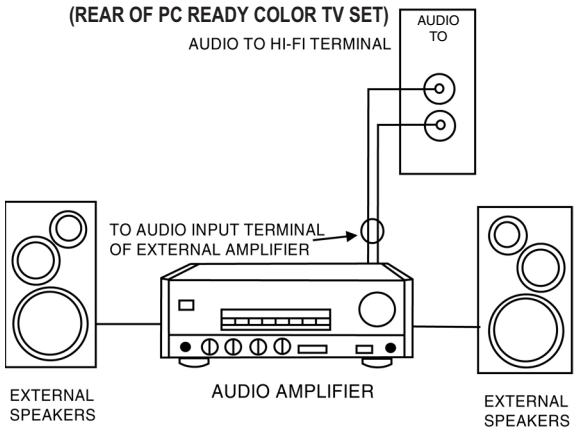
REAR PANEL CONNECTIONS



NOTE: Connect only 1 component to each input jack.

CONNECTING EXTERNAL AUDIO AMPLIFIER

To control the audio level of an external audio amplifier with the remote control, connect the system as shown below.



NOTE: To prevent damage to the speaker and distorted sound, set the volume control of the audio amplifier lower and adjust the sound using the remote control of the PC ready color TV set.

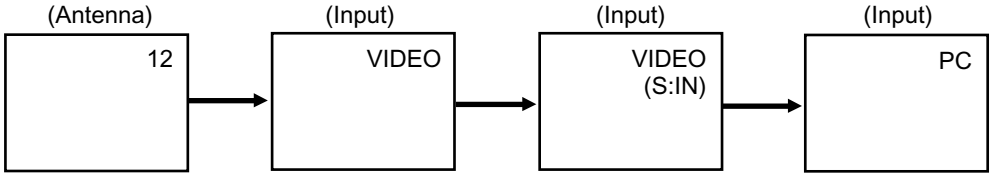
CONNECTING EXTERNAL VIDEO SOURCES

The exact arrangement you use to connect the VCR, camcorder, and laserdisc player to your TV set is dependent on the model and features of each component. Check the owner s manual of each component for the location of video and audio inputs and outputs.

The following connection diagrams are offered as suggestions. However, you may need to modify them to accommodate your particular assortment of components and features. For best performance, video and audio cables should be made from coaxial shielded wire.

Before Operating External Video Source
The input mode is changed every time the INPUT button is pressed as shown below. Connect external source to the INPUT terminal, then press the INPUT button as necessary to view the input source (see page 24).

INPUT MODE SELECTION ORDER (Example)



NOTE: When the PC ready color TV is set to VIDEO and a video signal is not received from VIDEO INPUT JACK on the jack panel of the PC ready color TV (i.e., VCR/laserdisc player, etc. is not connected or the video device is OFF), the screen will be gray-blue.

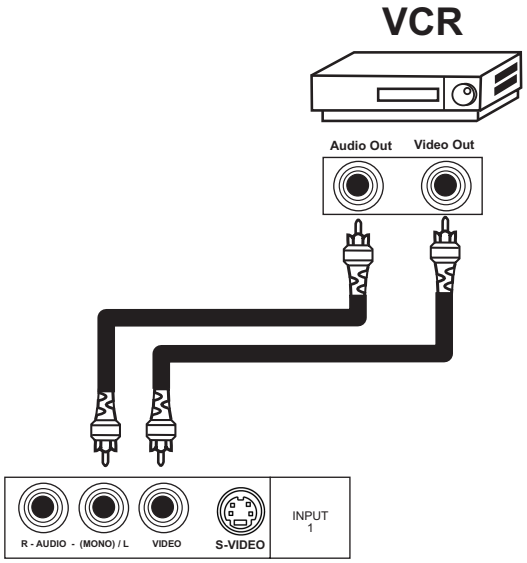
CONNECTING MONAURAL AUDIO VCR OR VIDEO DISC PLAYER

1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack on the PC ready color TV set below.

2. Connect the cable from the AUDIO OUT of the VCR or the laserdisc player to the INPUT (MONO)/L(AUDIO) jack.

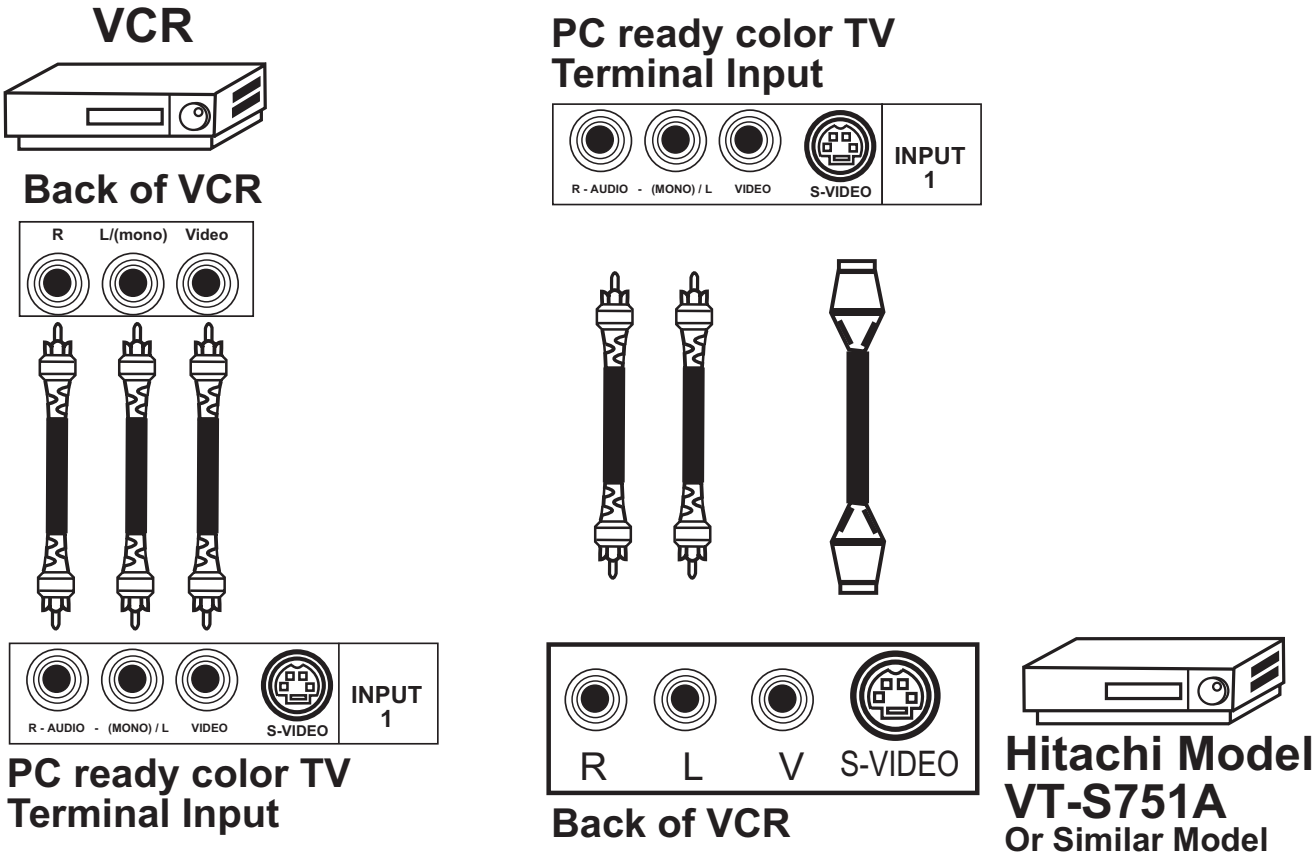
3. Press the INPUT button to view the program from the VCR or laserdisc player. The VIDEO mode disappears automatically after approximately eight seconds.

4. Press the INPUT button to return to the previous channel.



CONNECTING STEREO VCR OR STEREO LASERDISC PLAYER

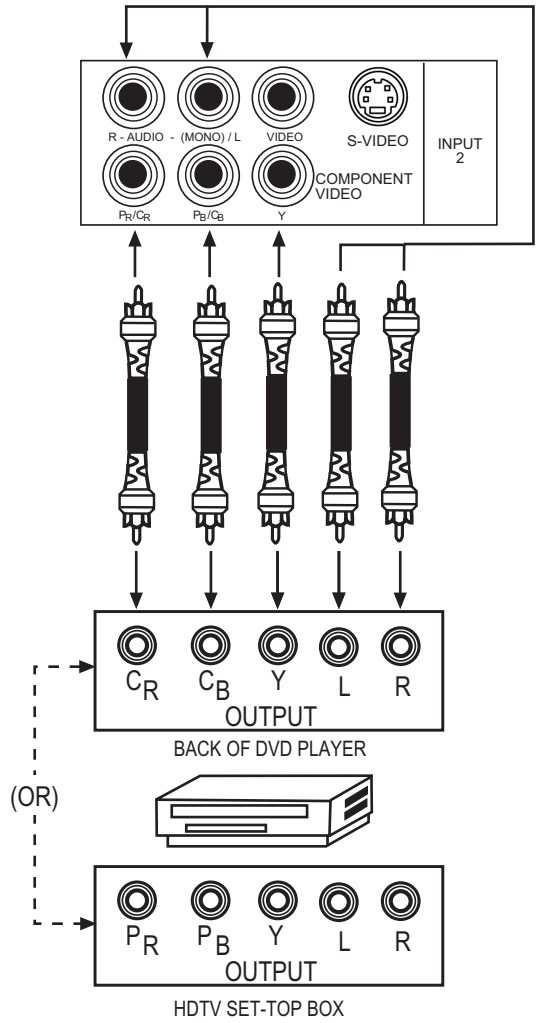
1. Connect the cable from the VIDEO OUT of the VCR or the laserdisc player to the INPUT (VIDEO) jack on the PC ready color TV.
2. Connect the cable from the AUDIO OUT R of the VCR or the laserdisc player to the INPUT(AUDIO/R) jack.
3. Connect the cable from the AUDIO OUT L of the VCR or the laserdisc player to the INPUT(AUDIO/L) jack.
4. Press the INPUT button to view the program from the VCR or laserdisc player. The mode VIDEO disappears automatically after approximately eight seconds.
5. Press the INPUT button to return to the previous channel.



NOTE:	Completely insert the cable connection when connecting to rear panel jacks. The picture that is played back will be abnormal if the cable connection is loose. If you have an S-VHS VCR, you can use the S-INPUT cable in place of the standard video cable.

CONNECTING A STEREO LASERDISC PLAYER OR DVD PLAYER TO INPUT 2.

1. Connect the cable from the Y OUT of the Laserdisc or the DVD player to the INPUT 2 (Y) jack as shown on the PC color ready TV set below.
2. Connect the cable from the P_B/C_B OUT or B-Y OUT of the Laserdisc or the DVD player or SET-TOP BOX to the INPUT 2 (P_B/C_B) jack, as shown on the PC ready color TV set below.
3. Connect the cable from the P_R/C_R OUT or R-Y OUT of the Laserdisc or the DVD player or SET-TOP BOX to the INPUT 2 (P_R/C_R) jack, as shown on the PC ready color TV set below.
4. Connect the cable from the AUDIO OUT R of the Laserdisc or DVD player or SET-TOP BOX to the INPUT 2 (AUDIO/R) jack.
5. Connect the cable from the AUDIO OUT L of the Laserdisc or DVD player or SET-TOP BOX to the INPUT 2 (AUDIO/L) jack.
6. Press the INPUT button until VIDEO:2 appears, to view the program from the Laserdisc or DVD player or SET-TOP BOX. The mode VIDEO:2 disappears automatically after approximately eight seconds.
7. Press the INPUT button to return to the previous channel.



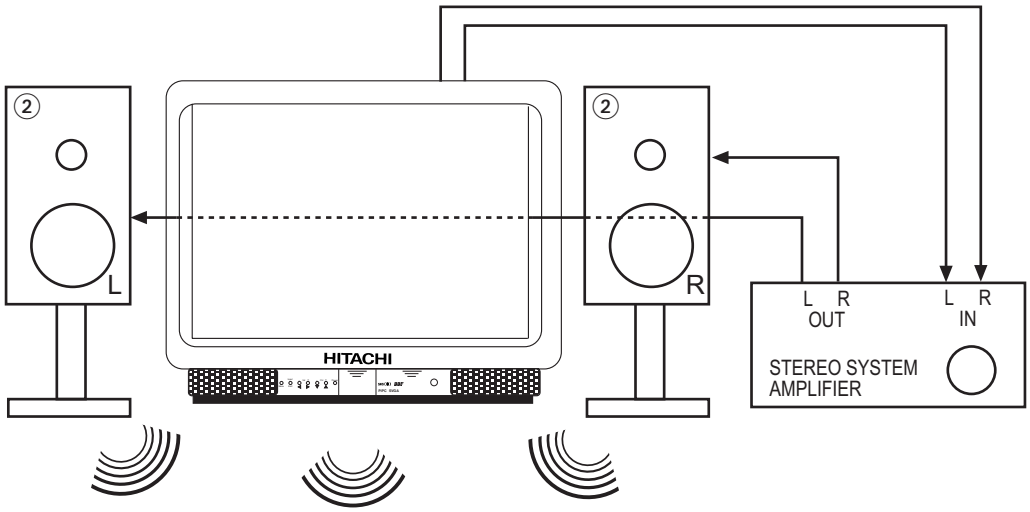
NOTE: Completely insert the cable connection when connecting to rear panel jacks. The picture that is played back will be abnormal if the connection is loose.

See Page 14 for TIPS ON REAR PANEL CONNECTIONS.

Match the numbers below to the diagrams for speaker placement and refer to the table for the different surround sound requirements.. (See page 54 to 56 for SRS and BBE functions.)

① The PC ready color television s internal speakers.

② These speakers are connected to a separate audio amplifier. Use the Audio to HI-FI output on the PC ready color TV.



TV MODE

SRS (●) FEATURE	REQUIRED CONNECTION	OPTIONAL CONNECTION	EFFECT (TV MODE)
OFF	①	②	Receive mono and stereo sound.
ON	①	②	Exciting and realistic 3D sound experience from just two speakers. Sound Retrieval System.

VIDEO/PC MODE

SRS (●) FEATURE	REQUIRED CONNECTION	OPTIONAL CONNECTION	EFFECT (VIDEO/PC MODE)
OFF	①	②	Receive mono and stereo sound.
3D - STEREO	①	②	At stereo input. Exciting and realistic 3D sound experience.
3D - MONO	①	②	At mono input. Sound will be louder.

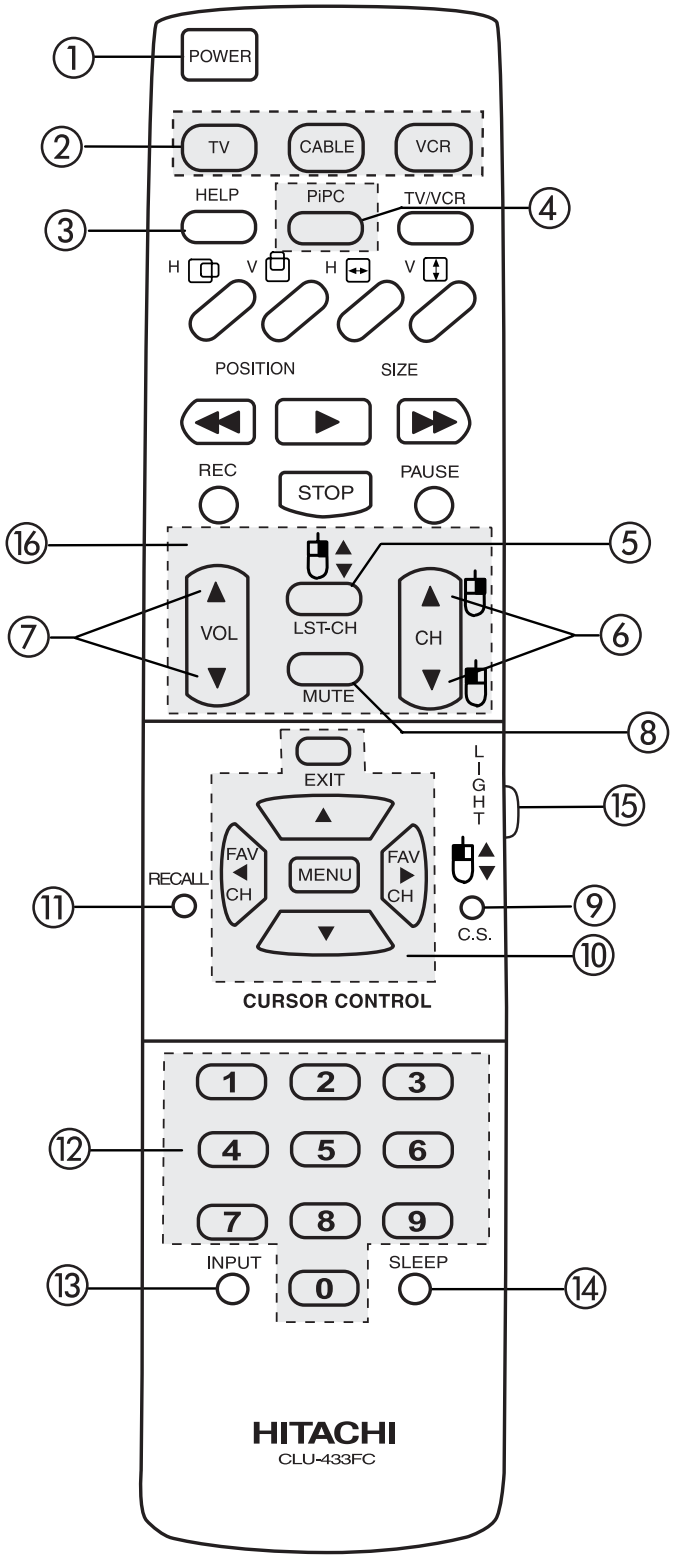
TV/VIDEO/PC MODE

BBE® FEATURE	REQUIRED CONNECTION	OPTIONAL CONNECTION	EFFECT (TV/VIDEO/PC MODE)
OFF	①	②	Receive mono and stereo sound.
ON	①	②	Sound is natural and crisp from just two speakers.

NOTE: SRS and BBE works and can be turned on at the same time.

HOW TO USE THE REMOTE TO CONTROL YOUR TV

A detailed explanation of the circled numbers follows on page 22 to 24.



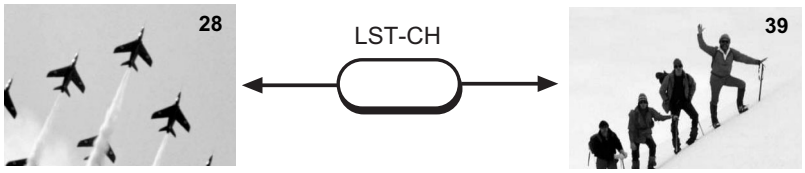
① **TV POWER Button**
Press this button to turn the PC ready color TV set on or off.

② **TV/CABLE /VCR Button**
Press these buttons to control your PC ready color TV, cable/satellite or VCR. See remote control programming section for detailed explanation.

③ **HELP Button**
Press to display On-Screen Display help messages. (TV Mode Only)

④ **PiPC Button**
Press this button to go to PinPC PC mode. (PC Mode only)

⑤ **LAST CHANNEL (LST-CH) Button**
Use this button to select between the last two channels viewed. (Good for watching two sporting events, etc.)



⑥, ⑫ **CHANNEL SELECTOR Buttons**
Enter two or three numbers to select channels. Enter 0 first for channels 1 to 9. For channels 100 and above, press the 1 button and wait for two seconds before pressing the last two digits of the channel.

Channel selection may also be performed by pressing CH up (▲) or down (▼).

You may also use these buttons for channel scanning. Press and hold the CH up (▲) or down (▼) buttons and the PC ready color TV will start quickly scanning through the channels. Release the CH up (▲) or down (▼) buttons when the PC ready color TV scans to the channel you wish to watch and the PC ready color TV will tune to that channel.

⑦, ⑧ **VOLUME, MUTE Buttons**
Press the VOLUME up (▲) or down (▼) button until you obtain the desired sound level.

To turn the sound off instantly to answer the telephone, etc., press the MUTE button. Press the MUTE button again or press the VOLUME up (▲) button to restore the sound.

⑨ **COMMERCIAL SKIP (CS) Button**
Press to activate 90-second commercial skip timer. You may change channel(s) and after the 90 seconds has lapsed, the PC ready color TV will automatically tune back to your original channel.

NOTE: CS will be cancelled if you use the LST-CH or use Setup and Custom menus.

HOW TO USE THE REMOTE TO CONTROL YOUR TV

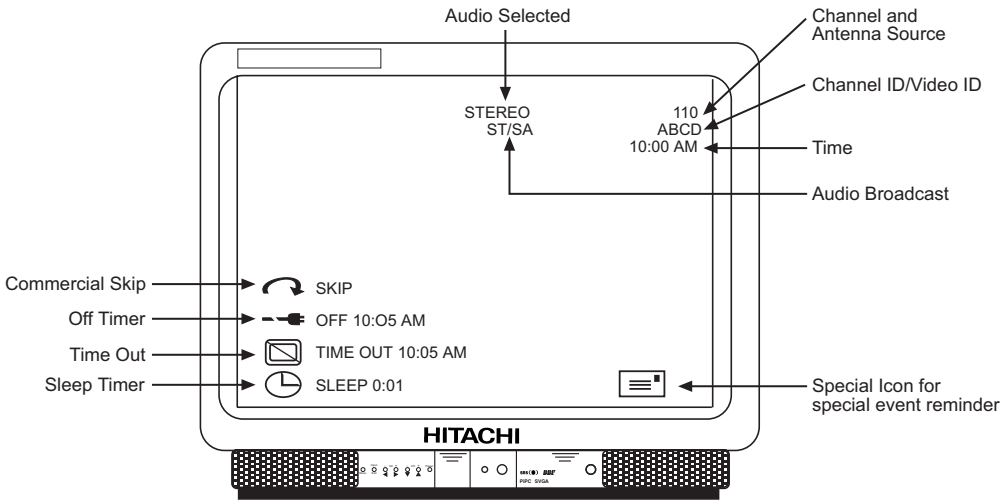
⑩ **MENU, EXIT and CURSOR Buttons**
All On-Screen Display features can be set or adjusted by using these buttons.

The MENU button will start the On-Screen Display.

The EXIT button will quit the On-Screen Display.

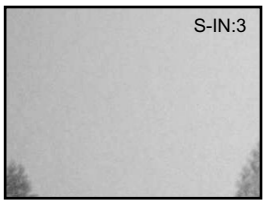
The CURSOR button will highlight functions or adjust and set different features. Pressing the cursor buttons will also give you access to the FAMILY FAVORITES CHANNELS On-Screen Display.

⑪ **RECALL Button**
Press this button to display audio selected, current channel, antenna source, audio broadcast, time, time out and sleep timer.

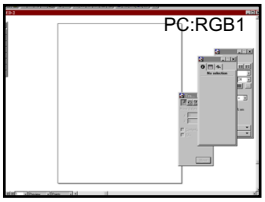


When a Video Input is connected to Video: 1.

When an S-Video Input is connected to Video: 3.



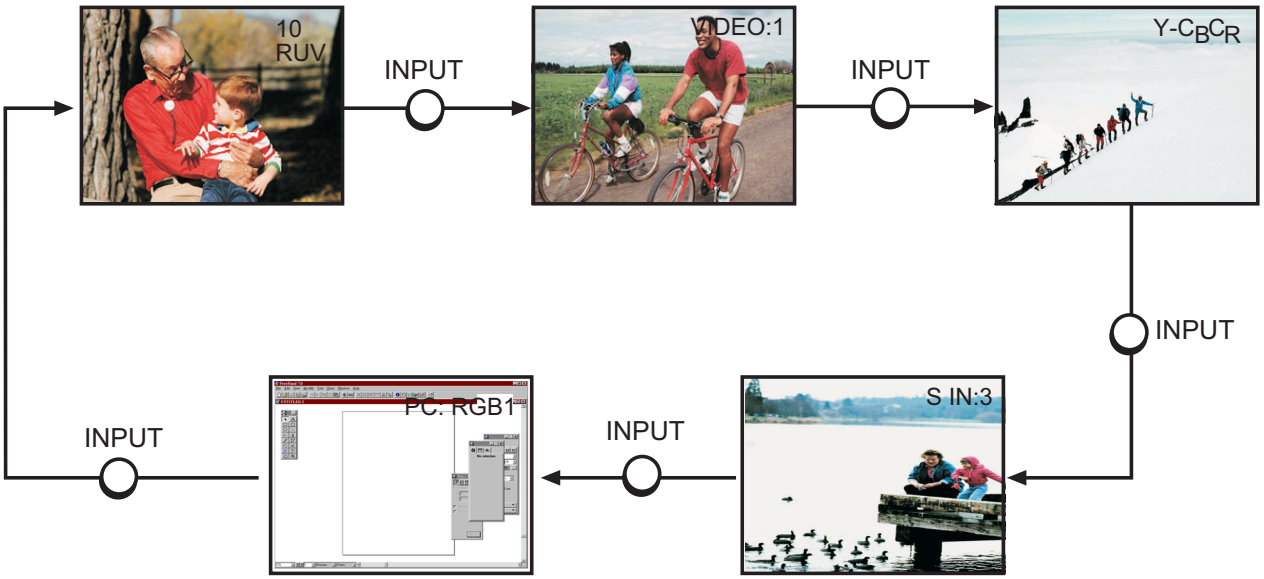
When a PC Input is connected to PC:RGB 1.



When a COMPONENT: Y-C_BC_R Input is connected to Video: 2.

NOTE: You can also use the RECALL button to quickly clear many of the other On-Screen Displays.

⑬ **INPUT Button**
The INPUT button will select between the antenna signal, the video input jacks and PC input, each time the button is pressed.



⑭ **SLEEP Button**
Press this button to display the SLEEP TIMER in the lower left corner of the screen. Every subsequent press of this button will add 15 minutes to the timer, up to a maximum of three hours. Once set, use RECALL when you want to view time remaining. If the SLEEP button is pressed while the timer is set, it will reset to the original condition.

⑮⑯ **LIGHT Button**
When you are in a dark room, press the light button ⑮ on the side of the remote to light up the buttons shown in ⑯. The light will stay on for about 8 seconds if the light button is not pressed again. These buttons will not appear to light if the room is to bright.

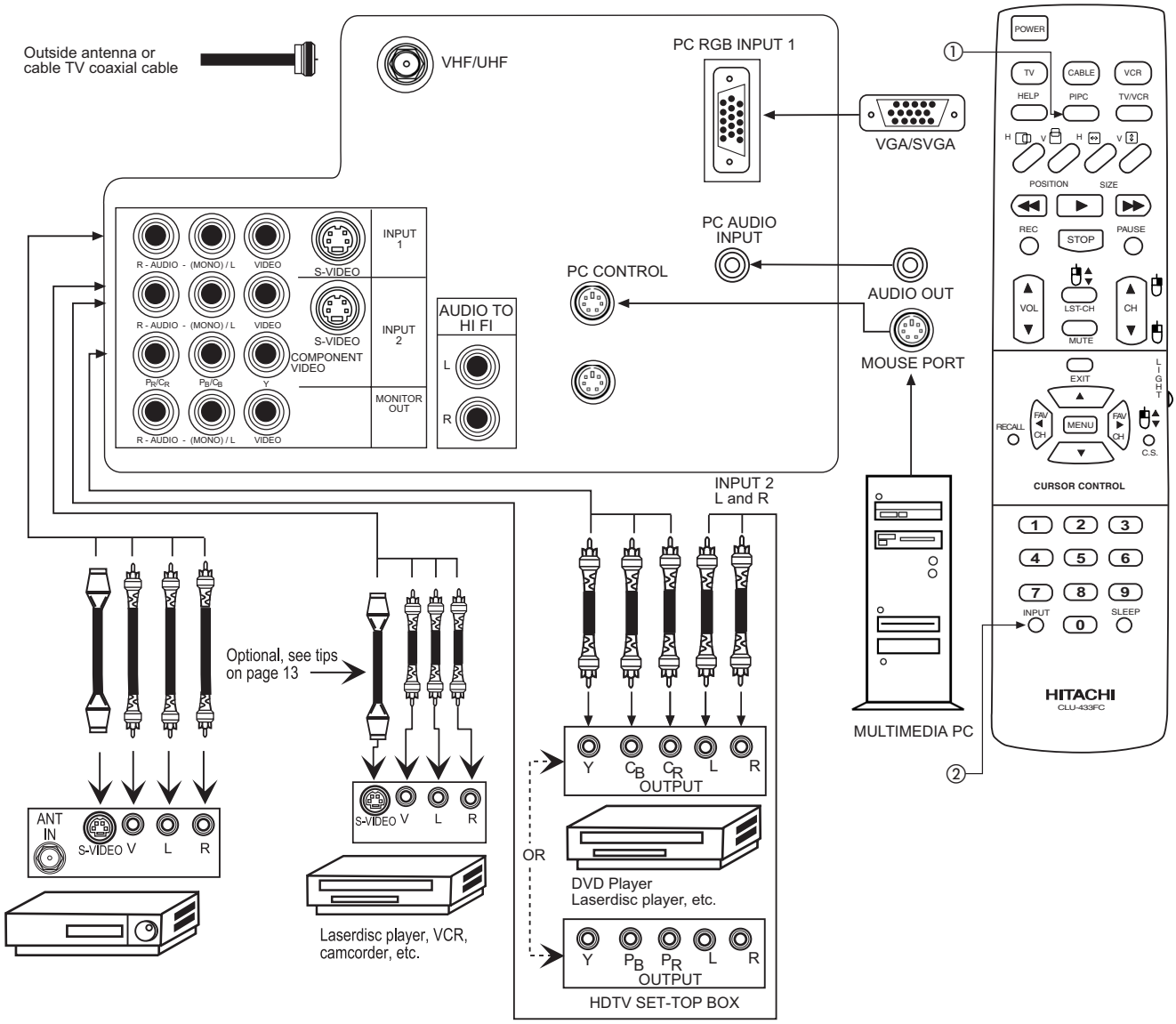
PICTURE-IN-PC

Your PC ready color TV incorporates PinPC technology designed for improved viewing enjoyment.

The Picture-in-PC feature is convenient when you want to watch a program. You can watch your PC operation while viewing other programs from Antenna, Video and component input sources.

PC input sources can only be viewed as a main pictures.

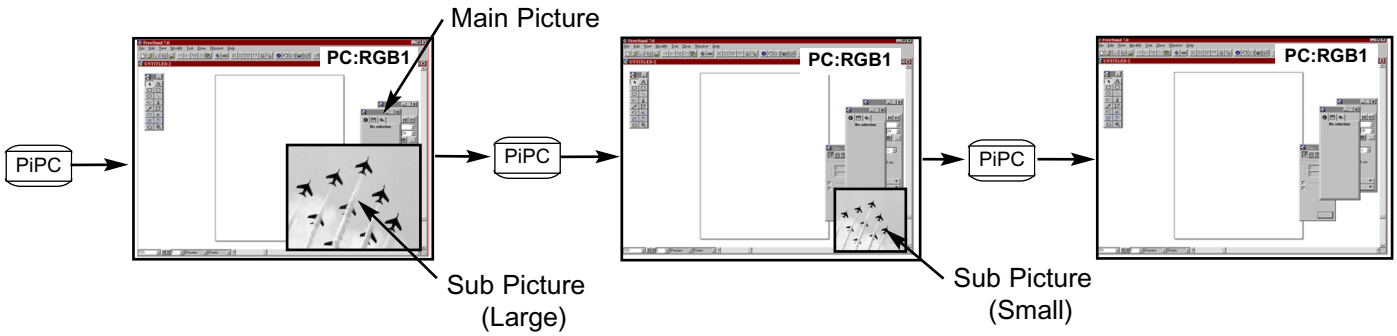
Antenna, Video and component inputs can be viewed as the sub-picture.



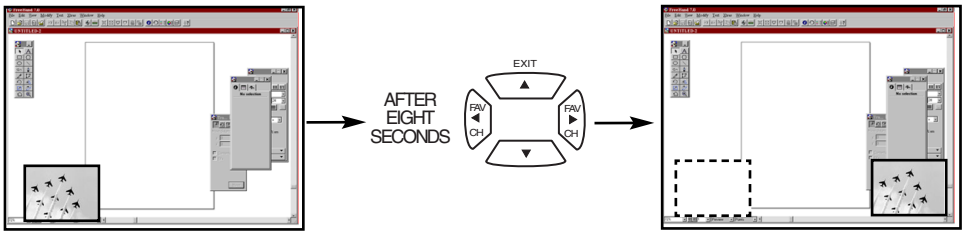
① **PiPC Button**
Press the PiPC Button and a Sub-Picture will appear. This PiPC works only on PC mode.

② **Input Button**
Press Input to change Sub-Picture (See Page 24) Input Source.

NOTE: When PiPC is on Antenna Source, press channel ▲, ▼ to change channel or use number button.



It is also possible to customize the PiPC position. To do this, wait until the On-Screen Display disappears (about eight seconds) and then use the CURSOR ▶, ◀ buttons. Press CURSOR ▲, ▼ to select Audio Input source to TV or PC mode.



NOTE: PinPC works correctly when receiving the following signal timings, horizontal and vertical position of PinPC may not work correctly with other timings.

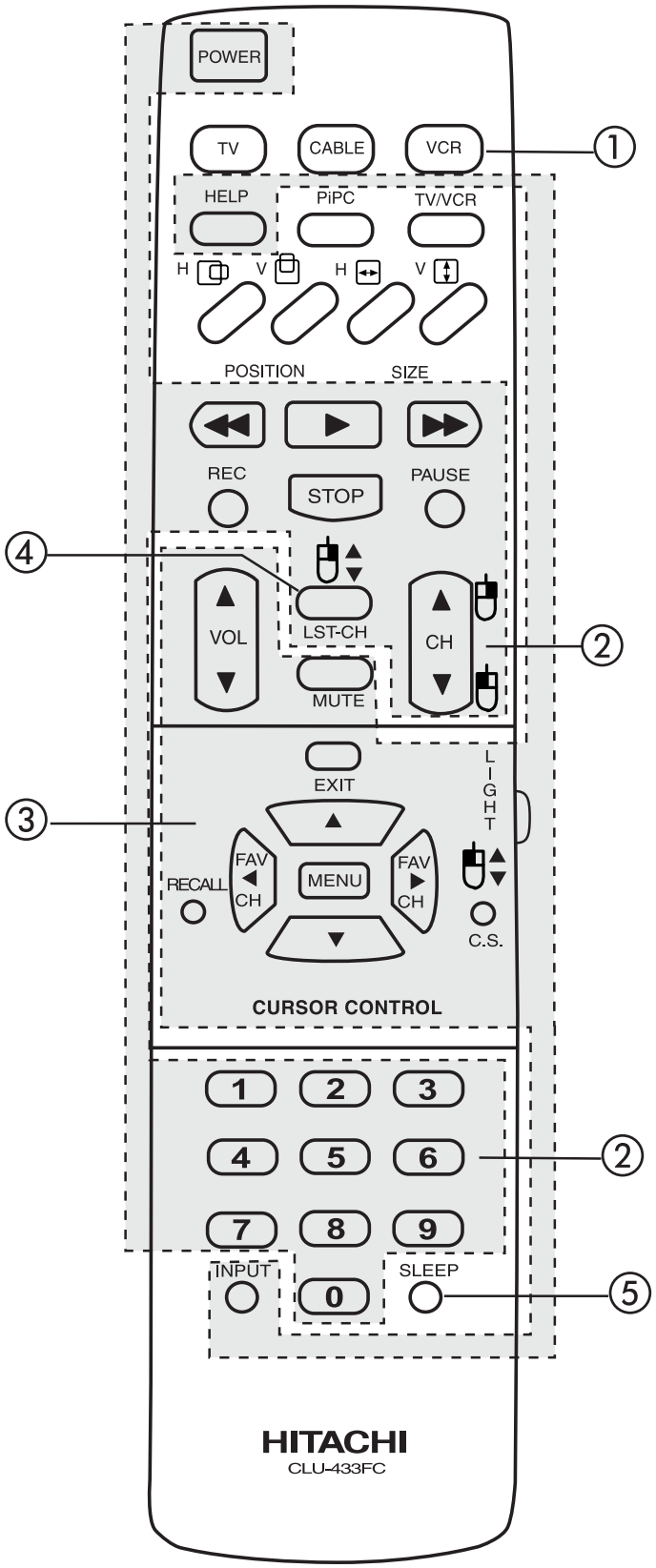
Signal	Resolution	Horizontal		Vertical	
		Freq. (kHz)	Polarity	Freq. (Hz)	Polarity
VGA	640x480	31.5	Negative	60	Negative
VGA	640x480	37.8	Negative	72	Negative
SVGA	800x600	37.8	Positive	60	Positive

NOTE: Component input with High Definition (1080 I) and Standard Definition (480P) Digital signals do not show up on the PinPC sub-picture because digital decoding is only for the main picture.

NOTE: If PinPC is activated, the remote control mouse operation does not work. Use the PC mouse for control instead of the remote control mouse.

USING THE REMOTE TO CONTROL YOUR VCR FUNCTIONS

A detailed explanation of the circled number follows on page 28.



USING THE REMOTE TO CONTROL VCR FUNCTIONS

Operating the precoded function for your VCR

This remote is designed to operate different types of VCRs. You must first program the remote to match the remote system of your VCR. (Refer to page 31.)

1. Turn on your VCR.
2. Aim the remote control at the front of your VCR.
3. Press the VCR button to switch to the VCR precoded mode.
4. While holding down the VCR button on the remote, enter the two digit preset code that matches your VCR as shown on page 31. The remote will turn off your VCR when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your VCR. If the VCR does not turn off after five seconds, try a different two digit preset code.
5. The remote will now control your VCR.

NOTES:
1. If your VCR cannot be operated after performing the above procedures, your VCR code has not been precoded into the remote.
2. In the unlikely event that your VCR cannot be operated after performing the above procedures, please consult your VCR operating guide.
3. The remote control will remember the codes you have programmed in until the batteries are removed from the remote control. After replacing the batteries repeat the entire programming procedure stated above.
4. If your VCR does not have a power function, the remote will issue the CHANNEL UP (▲) function.

① **VCR Button**
This allows the remote to control your VCR by setting it to VCR mode.

② **PRECODED VCR Buttons**
These buttons transmit the chosen precoded VCR codes.

③ **EXCLUSIVE PC ready color TV Buttons**
These buttons are for operating the PC ready color TV.
If your VCR is a Hitachi brand, the MENU button will start your VCR on-screen display.

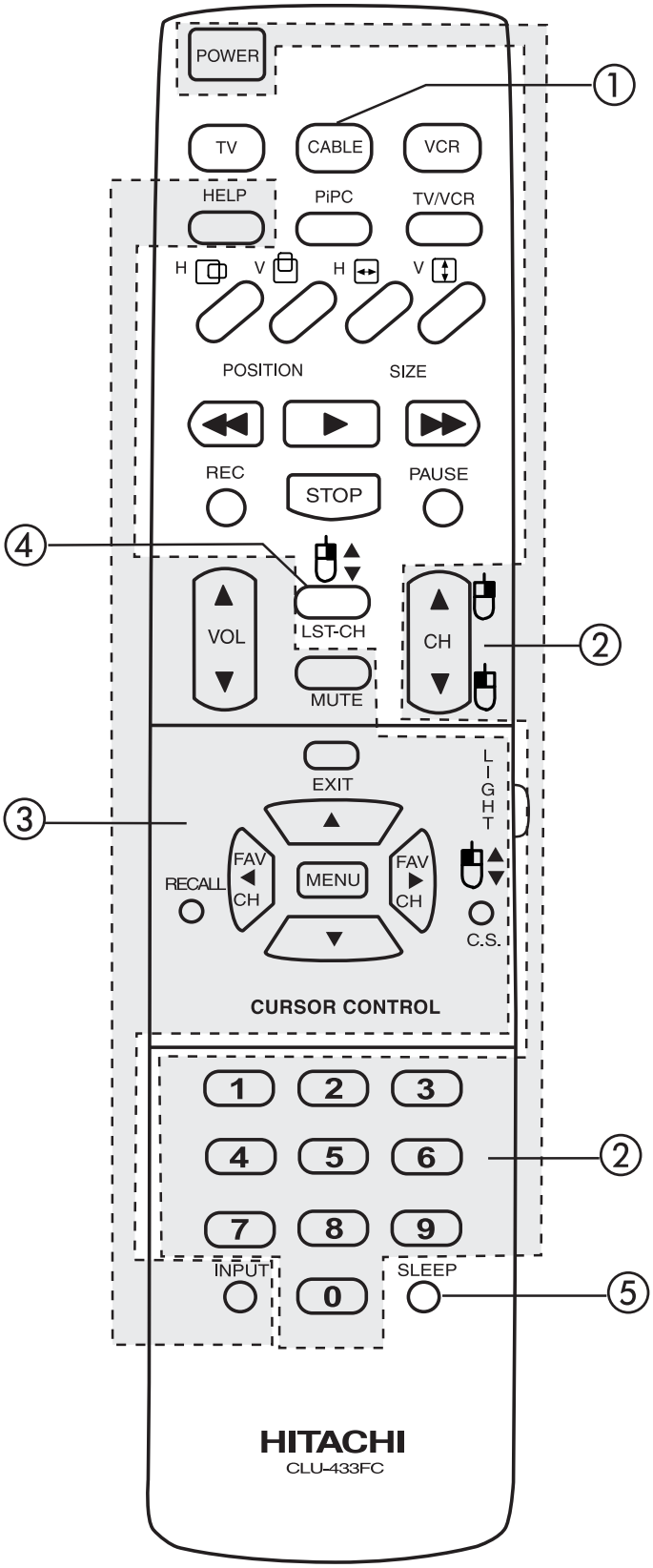
④ **LST-CH Button**
If your VCR has an ENTER function, this button will send the chosen VCR + ENTER code.

⑤ **SLEEP Button**
If your VCR has a +100 function, this button will send the chosen VCR +100 code.

NOTE: To use VCR RECORD, press the REC button twice.

USING THE REMOTE TO CONTROL CABLE/SATELLITE BOX FUNCTION

A detailed explanation of the circled numbers follows on page 30.



USING THE REMOTE TO CONTROL CABLE/SATELLITE BOX FUNCTIONS

Operating the precoded function for your cable/satellite box.

This remote is designed to operate different types of cable boxes and satellite systems. You must first program the remote to match the remote system in your cable/satellite box. (Refer to page 31.)

1. Turn on your cable/satellite box.
2. Aim the remote control at the front of your cable/satellite box.
3. Press the CABLE button to switch to cable/satellite box mode.
4. While holding down the CABLE button, enter the two digit preset code that matches your cable/satellite box as shown on page 319. The remote will turn off your cable/satellite box when the correct two digit preset code is entered. When this occurs, the remote control is programmed for your cable/satellite box. If the cable/satellite box does not turn off after five seconds, try another two digit preset code.
5. The remote will now control your cable/satellite box.

NOTES:

1. If your cable/satellite box cannot be operated after performing the above procedures, your cable/satellite box code has not been precoded into the remote.
2. In the unlikely event that your cable/satellite box cannot be operated after performing the above procedures, please consult your cable/satellite box operating guide.
3. The remote control will remember the codes you have programmed in until the batteries are removed from the remote control. After replacing the batteries, repeat the entire programming procedure stated above.
4. If your cable/satellite box does not have a power function, the remote will issue the CHANNEL UP (▲) function.

① **CABLE Button**
This button allows the remote to control your cable/satellite box by setting it to CABLE/SATELLITE mode.

② **PRECODED CABLE/SATELLITE BOX Buttons**
These buttons transmit the chosen precoded CATV and satellite codes.

③ **EXCLUSIVE PC ready color TV Buttons**
These buttons are for operating the PC ready color TV.

④ **LST-CH Button**
If your cable/satellite box has an enter function, this button will send the cable/satellite box enter code.

⑤ **SLEEP Button**
If your cable/satellite box has a +100 function, this button will send the cable/satellite +100 code.

VCR AND CABLE/SATELLITE CODES

The remote control is capable of operating many brands of VCRs and cable boxes. You must first program the remote control to match the remote system in your VCR or cable box.

NOTE: The remote control memory is limited. Some models of VCRs or cable boxes may not operate. The remote control is not designed to control all features that are available in all models.

VCR BRAND CODE

Adventura 00
Aiko 08
Aiwa 00
Akai 01, 48, 49
American High 22
Asha 45
Audiovox 23
Beaumark 45
Bell & Howell 32
Brandt 43
Broksonic 33, 34, 42, 51, 52
Calix 23
Canon 22
Capehart 06
Carver 31
CCE 08, 30
Citizen 08, 23
Colt 30
Craig 18, 23, 30, 45
Curtis Mathes 01, 22, 47
Cybernex 45
Daewoo 06, 08, 16, 38, 50
Daytron 06
Dynatech 00
Electrohome 23
Electrophonic 23
Emerex 07
Emerson . . . .00, 08, 12, 15, 23, 27, . .28, 33, 34, 37, 42, 48, 51, 52
Fisher 18, 20, 32, 46
Fuji 09, 22
Funai 00
Garrard 00
GE 03, 22, 41, 47
Goldstar 23, 24, 44
Gradiente 00
Harley Davidson 00
Harman/Kardon 24
Harwood 30
Headquarter 17
Hi-Q 18
Hitachi 01, 02, 03, 04
Jensen 01
JVC 01, 13, 26
KEC 08, 23
Kenwood 01, 24, 26
KLH 30
Kodak 22, 23
Lloyd 00
Lloyd s 27
Logik 30
LXI 23
Magnavox 14, 22, 29, 31, 35
Magnin 45
Marantz 22, 31
Marta 23
Matsushita 22
MEI 22
Memorex . . . . . .00, 14, 17, 18, 19, ...22, 23, 32, 45
MGA 15, 48
MGN Technology 45
Minolta 02, 04
Mitsubishi 15, 26, 40, 48, 49
Motorola 19, 22
MTC 00, 45
Multitech 00, 30
NEC 01, 05, 24, 26, 32
Nikko 23
Noblex 45
Olympus 11, 22
Optimus 19, 23, 32
Orion 51
Panasonic 10, 11, 22, 39, 53
Penney . . .02, 05, 22, 23, 24, 45, 46
Pentax 02, 03, 04
Philco 22
Philips 22, 29, 31
Pilot 23
Pioneer 26
Portland 06
Protec 30
Pulsar 14
Quarter 17
Quartz 17
Quasar 22
Radio Shack 00, 23
Radix 23
Randex 23
RCA 02, 03, 04, 35, 41, 47
Realistic . . . . . .00, 17, 18, 19, 20, ...22, 23, 32, 45
Ricoh 21
Runco 14
Samsung 16, 45
Sanky 14, 19
Sansui 01, 26
Sanyo 17, 18, 32, 45
Scott 15, 16, 33, 34, 37, 42
Sears . . . . . .02, 04, 17, 18, 20, ...22, 23, 32, 46
Sharp 19
Shintom 30
Shogun 45
Singer 30
Sony 07, 09, 21, 22
STS 02
Sylvania 00, 15, 22, 29, 31
Symphonic 00
Tatung 01
Teac 00, 01
Technics 22, 39
Teknika 00, 22, 23
Telefunken 43
TMK 27, 45
Toshiba 15, 16, 20, 37
Totevision 23, 45
Unitech 45
Vector 16
Vector Research 05, 24
Video Concepts 05, 16, 48
Videosonic 45
Wards . . . . . .00, 02, 18, 19, 22, ...30, 35, 37, 45, 47
XR-1000 . . . . . .00, 22, 30
Yamaha 24
Zenith 09, 14, 21

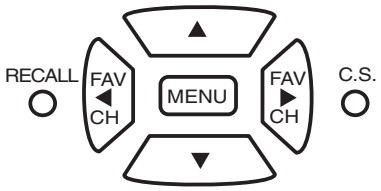
CABLE BRAND CODE

ABC . . . . . .00, 07, 08, 18, 19, ...21, 37, 38, 53
Antronix 40
Archer 12, 25, 40
Belcor 33
Cable Star 33
Century 12
Citizen 12
Colour Voice 31, 45
Comtronics 26, 29
Contec 22
Dae Ryung 21
Eastern 15
Electricord 32
Everquest 56
Focus 57
Garrard 12
GC Electronics 33, 40
Gemini 04, 39, 44, 56
General Instrument 00, 13
Gold Star 11, 26
Hamlin 03, 09, 14, 23, 24
Hitachi 00
Hytex 37
Jasco 12
Jerrold . . .00, 08, 13, 38, 53, 55, 56
Macom 36
Magnavox 16
Memorex 02
Movie Time 30, 32, 34
NSC 30, 34, 39
Oak 22, 37, 50
Panasonic 02, 10, 49
Paragon 02
Philips . . . . . .12, 16, 17, 27, 31, ...43, 44, 45, 47
Pioneer 06, 11, 20
Popular Mechanics 57
Pulsar 02
RCA 49
Realistic 40
Recoton 57
Regal 03, 09, 23, 35
Regency 15
Rembrandt 00, 39
Runco 02
Samsung 11, 26
Scientific Atlanta 18, 21, 42, 48
Signal 26, 56
Signature 00
SL Marx 26
Sprucer 01, 49
Starcom 38, 53, 56
Stargate 26, 56
Starquest 56
Starsight 58, 59
Sylvania 19
Teleview 26
Texscan 19
Tocom 07, 28, 55
Toshiba 02
Tusa 56
TV 86 30
Unika 12, 40
United Artists 37
United Cable 53
Universal 12, 25, 32, 33, 35, 40
Videoway 51
Viewstar 16, 29, 30, 41
Zenith 02, 52, 60
Zentek 57
Hitachi (SAT) 61
RCA (SAT) 62
SONY (SAT) 63

ULTRATEC ON-SCREEN DISPLAY

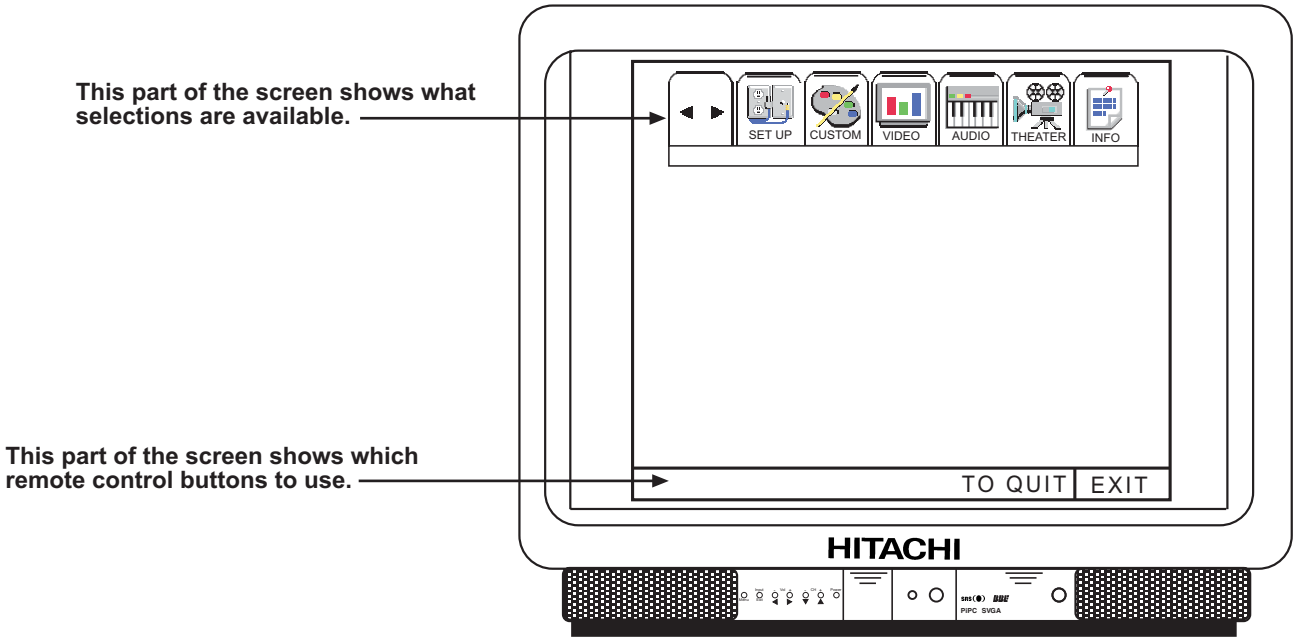
With HITACHI S ULTRATEC On-Screen Display, each category has it s own color and icon. This semi-transparent system includes SET-UP, CUSTOM, VIDEO, AUDIO, THEATER, and INFO CENTER categories. Using the four cursor buttons, you can easily access and control all of the PC ready color TV s functions. Checked boxes let you know which function you have chosen. You can also choose to access the menu in English, French, or Spanish.

1. Press MENU on the remote control to display the different features on your HITACHI PC ready color TV.
2. Press the CURSOR buttons to highlight and select different features.
3. Press EXIT on the remote control to quickly exit from a menu.
4. Press HELP on the remote control when a menu is displayed, and text will appear giving a description of that menu.

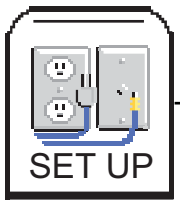


CURSOR CONTROL

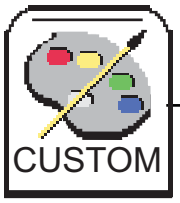
NOTE: Please see page 21 through 24 for details on remote control operation.



ULTRATEC ON-SCREEN DISPLAY



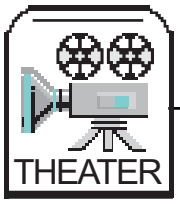
MENU LANGUAGE	Choose English, French, or Spanish language.
SIGNAL SOURCE	Select Antenna (Indoor or Outdoor) or Cable TV.
AUTO CHANNEL SET	First time set up for channel buttons.
CHANNEL MEMORY	Add or erase channel manually.
CHANNEL LIST	Check channel name, scan, and child lock.
CLOCK SET	Set before using timer features.



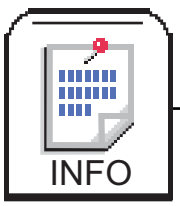
CHANNEL ID.	Label channels PAY1, ABC, ROLY, etc.
VIDEO ID.	Label video inputs VCR1, DVD1, etc.
FAMILY FAVORITES	Allows you to set and view favorite channels.
CHILD LOCK	Block channel picture and sound. (Parental Control)
4 EVENT PROGRAM	Turn PC ready color TV on and off once, daily, or weekly.
AUTO LINK	Automatically turn PC ready color TV on with any VIDEO input.
CLOSED CAPTION	Feature to display dialogue/text.
MENU BACKGROUND	Select from three types of backgrounds.

CONTRAST	Adjust contrast.
BRIGHTNESS	Adjust brightness.
COLOR	Adjust color.
TINT	Adjust tint.
SHARPNESS	Adjust sharpness.
RESET	Set VIDEO settings to factory preset condition.
ADVANCED SETTINGS	Improve picture performance.

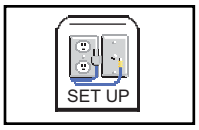
BASS	Adjust bass.
TREBLE	Adjust treble.
BALANCE	Adjust balance.
RESET	Set AUDIO settings to factory preset.
ADVANCED SETTINGS	Improve sound performance.
VOLUME CORRECTION	Lower volume on selected channels.



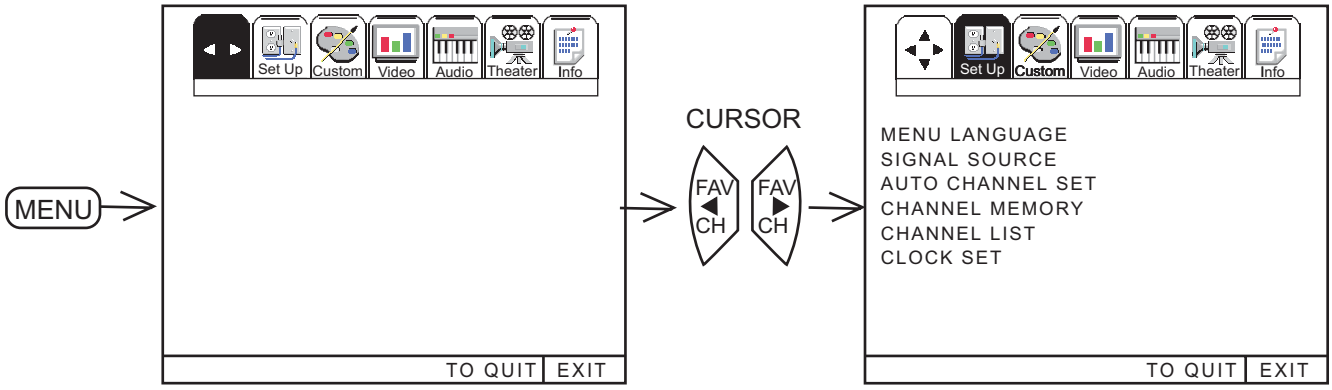
SRS	Produces 3-D sound using the PC ready color TV s speakers.
BBE	Produces High Definition sound that is natural and crisp using the PC ready color TV s speakers.



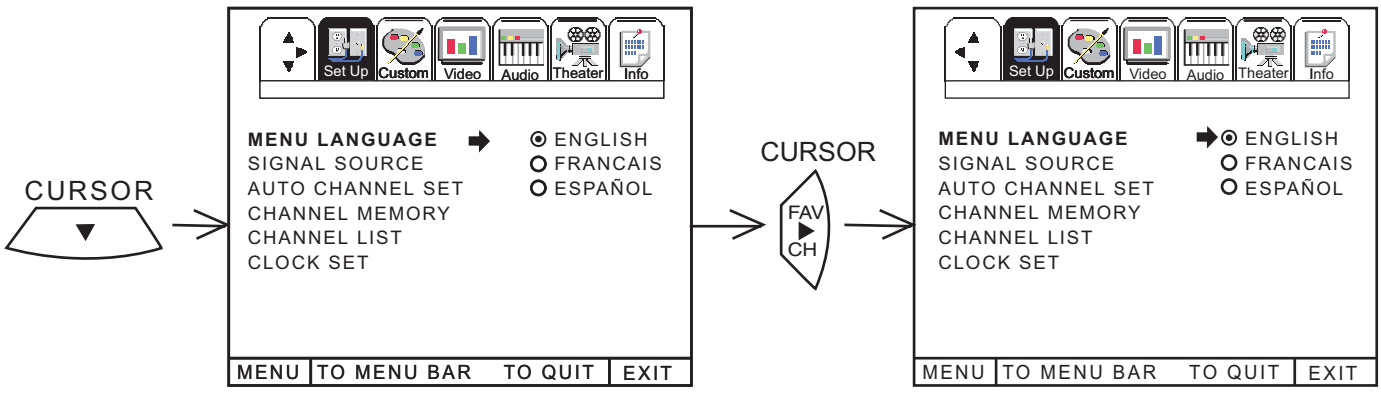
SPECIAL EVENT REMINDER	Set PC ready color TV to remind you of birthdays, etc..
CALENDAR	Check day, month, year, and special events.
AUTO HELP	Displays a description of the displayed menu.



Select SETUP when setting your PC ready color TV up for the first time. Use the CURSOR ▲ or ▼ buttons on the remote to highlight the function desired.



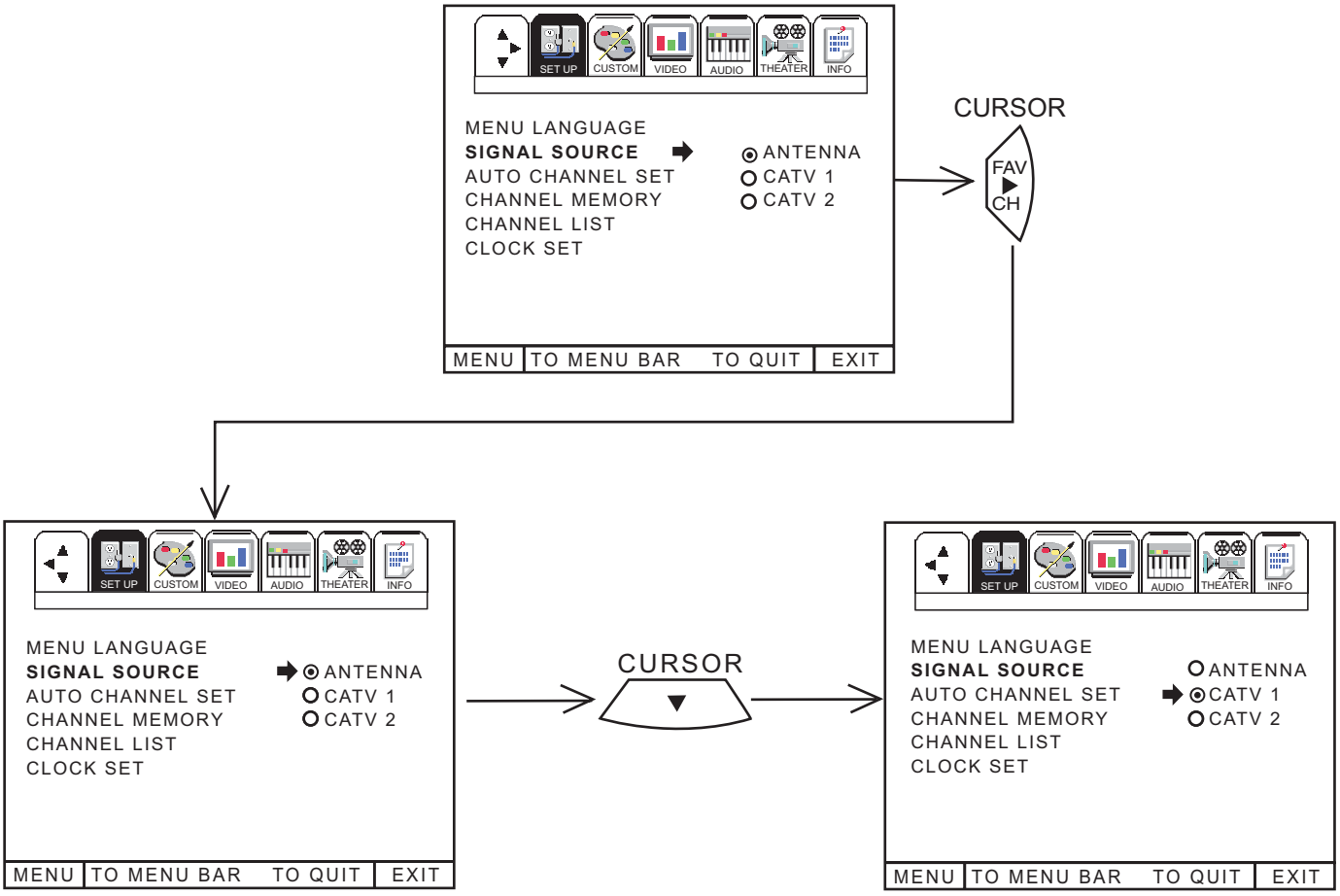
MENU LANGUAGE This feature will allow you to select any one of three different languages for all on-screen displays.



Use CURSOR ▲ or ▼ to select the MENU LANGUAGE of your choice.

Press EXIT to quit menu or CURSOR ◄ to return to previous menu.

SIGNAL SOURCE Select ANTENNA if you are using an indoor or outdoor antenna. Select CATV if you have cable TV.



Press CURSOR ▲ or ▼ to highlight and select the correct SIGNAL SOURCE mode.
Press EXIT to quit MENU or CURSOR ◄ to return to previous menu.

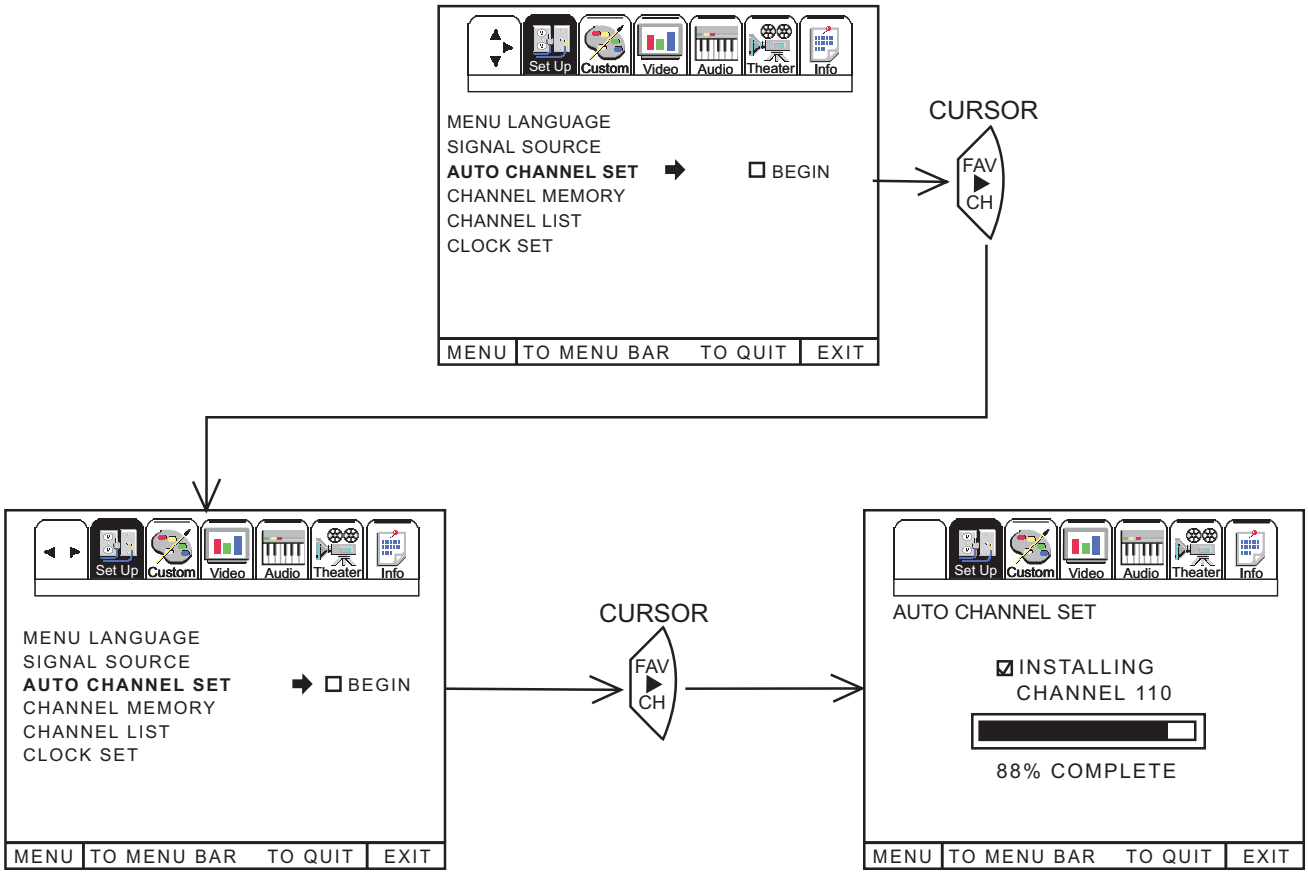
RECEPTION BAND		
AIR	CATV 1 OR CATV 2	
	CATV CHANNEL	Indicated on the screen
VHF 2 ~ 13ch UHF 14 ~ 69ch	VHF 2 ~ 13	2 ~ 13
	Mid band A ~ I	14 ~ 22
	A-5 ~ A-1	95 ~ 99
	Super band J ~ W	23 ~ 36
	Hyper band W + 1 ~ W + 28	37 ~ 64
	Ultraband W + 29 ~ W + 84	65 ~ 125

Reception channels for each mode are shown at the left.

Refer to your cable or TV guide for channel identification standards.

If certain CATV channels are poor or not possible in CATV1 mode, set SIGNAL SOURCE to CATV2.

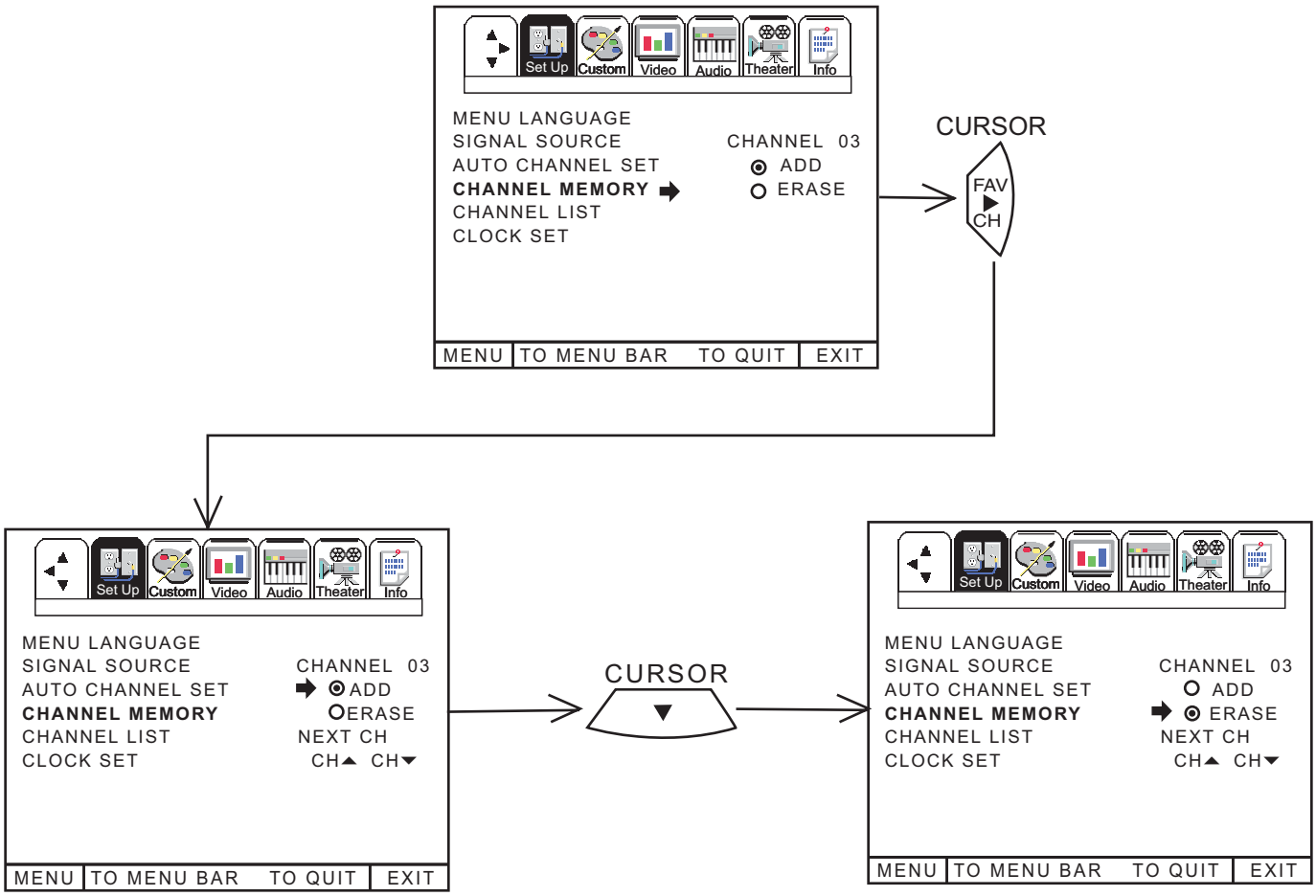
AUTO CHANNEL SET This feature will automatically store active TV channels in CHANNEL MEMORY. This will allow you to skip over unused channels when using CHANNEL UP (▲) or DOWN (▼) buttons.



If the EXIT button is pressed while the AUTO CHANNEL SET function is engaged, programming will stop.

Remember to select the correct SIGNAL SOURCE mode before using AUTO CHANNEL SET for the antenna input. See CHANNEL MEMORY to add or erase additional channels.

CHANNEL MEMORY Use this function after AUTO CHANNEL SET to add or erase additional channels to or from the PC ready color TV channel memory.

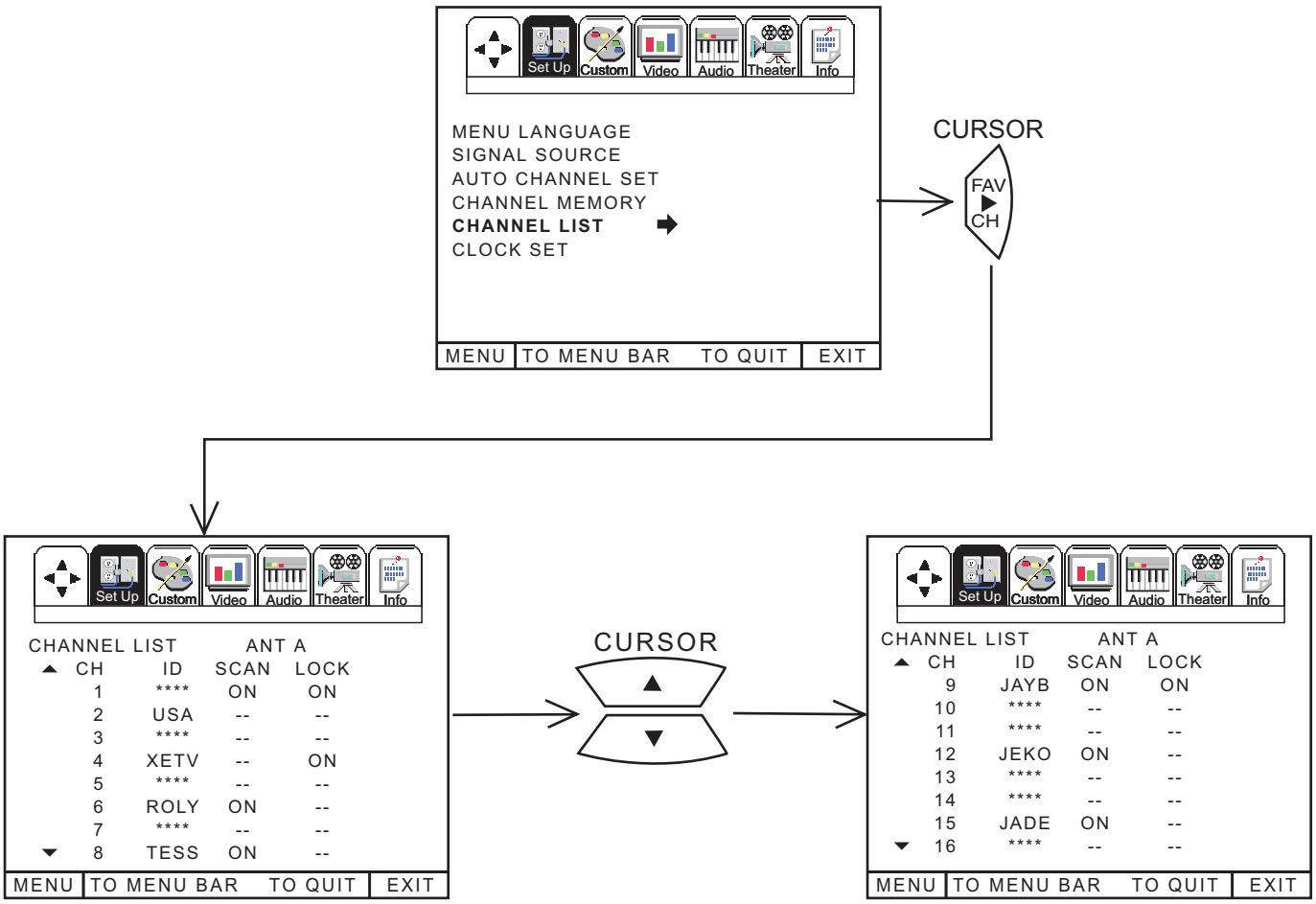


Add or erase additional channels while still in CHANNEL MEMORY using CHANNEL ▲ or ▼ or the number buttons to change the channel.

Press EXIT to quit menu or CURSOR ◄ to return to previous menu.

CHANNEL LIST

This function allows you to review which channels are labeled in CHANNEL ID (ID.), which have been added to CHANNEL MEMORY (SCAN), and which are protected by CHILD LOCK (LOCK).

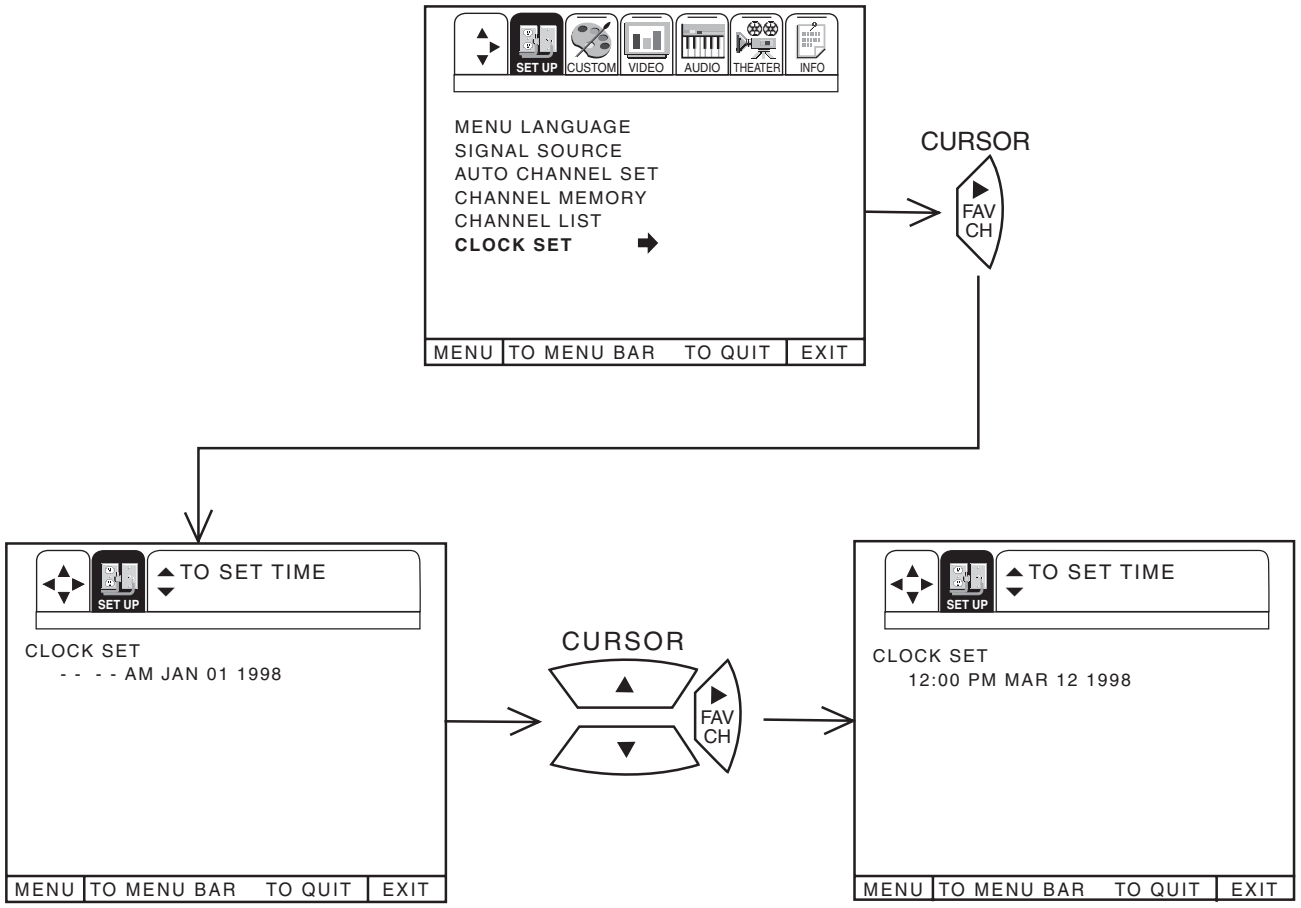


Press CURSOR ▲ or ▼ to review more channels.
Press EXIT to quit menu or CURSOR ◄ to return to previous menu.

NOTE: Each press of CURSOR ▲ or ▼ will display the next eight channels.

CLOCK SET

Use this feature for all time related functions. The time must be set before you can use the CALENDAR, 4 EVENT PROGRAM, SPECIAL EVENT REMINDER, or TV TIME OUT.



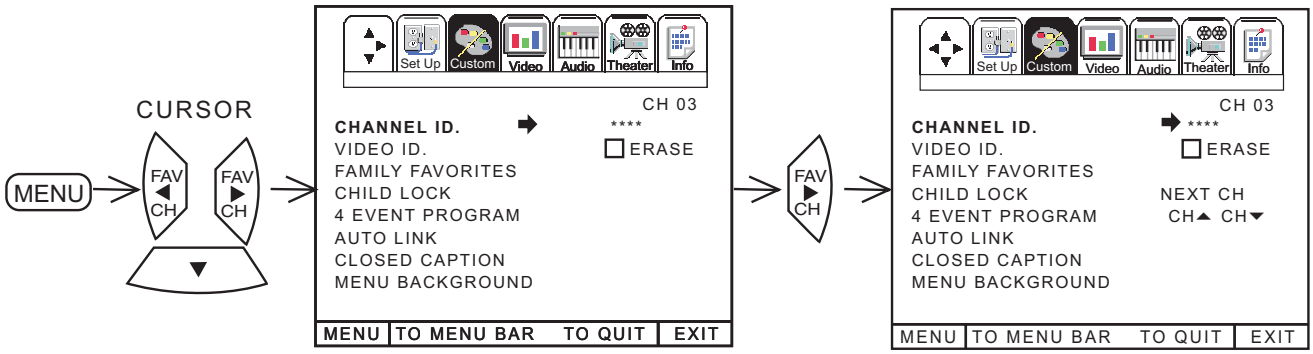
Use CURSOR ▲ or ▼ to set the time, AM or PM, date and year.
Press CURSOR ◄ or ► to change position.
Press EXIT to quit menu or CURSOR ◄ to return to previous menu when the CURSOR is in the first position.

CUSTOM

This selection contains advanced features which will make TV viewing easier and more enjoyable.

CHANNEL ID.

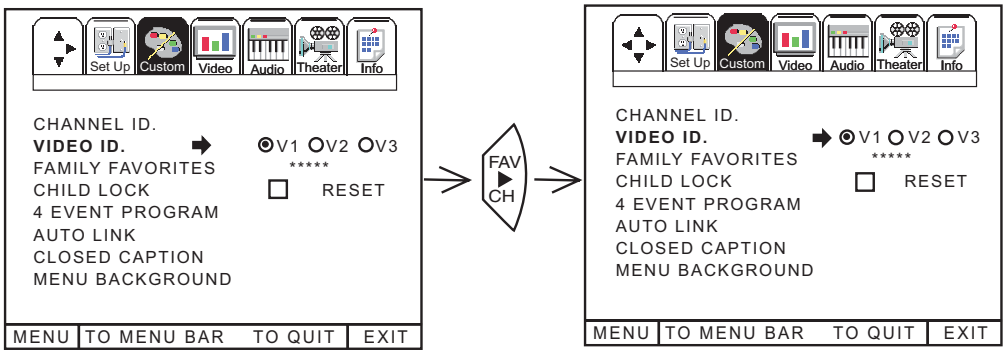
Use this feature to give up to 20 channels a name when ANTENNA signal source is selected and up to 60 channels a name when CATV1 signal source is selected.



Press CURSOR ▲ or ▼ to select letters.
Press CURSOR ◀ or ▶ to change character position.
Press CHANNEL ▲ or ▼ and the number buttons to select and label additional channels. The CHANNEL ID will now appear in the top right corner of the screen.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu when the CURSOR is in the first position.
The CHANNEL ID will appear in the top right corner of the screen when the RECALL button is pressed.
The (*) represents a blank space.
Select ERASE ID to erase a CHANNEL ID. An ARE YOU SURE? display will appear on the screen to confirm your choice.

VIDEO ID.

Use this feature to give a name to any of the three video inputs.



Press CURSOR ▶ to select the video input to be named.
Press CURSOR ▲ or ▼ to select letters.
Press CURSOR ▶ or ◀ to change position.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu when the CURSOR is in the first position.

(*) represents a blank space.
Select RESET to set VIDEO ID to original condition.

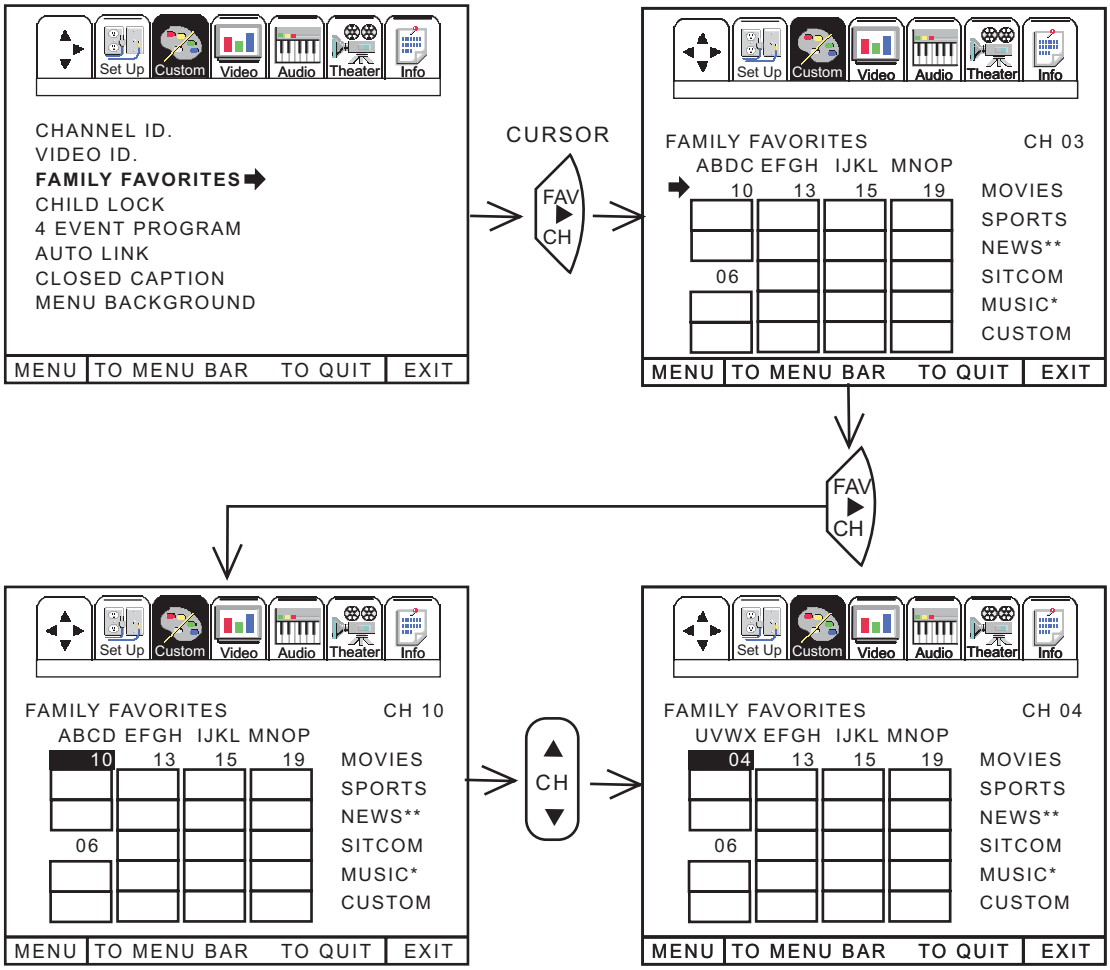
NOTE: VIDEO ID will be displayed only when VIDEO input is displayed as main picture.

CUSTOM

FAMILY FAVORITES (MENU)

This function allows you to group your favorite channels into six personalized categories that you can rename. A total of 24 channels can be stored in the FAMILY FAVORITES function.

With Family Favorites, you can easily access your favorite movie, sports, news, sitcom, music and custom stations by registering any of your favorite stations into one of six categories. Once you have input your four favorite stations in each category, you simply press any of the cursor buttons and the Family Favorites screen appears. Now you can easily switch between your 24 favorite stations.



To enter a channel into a category, highlight to the left of the category title.
Press CHANNEL ▲ or ▼ or the number buttons to enter the desired channel. Repeat until category has been set with your favorite channels. The channel to be added is displayed in the top right corner of the screen.
Enter channel 00 to erase a favorite channel.

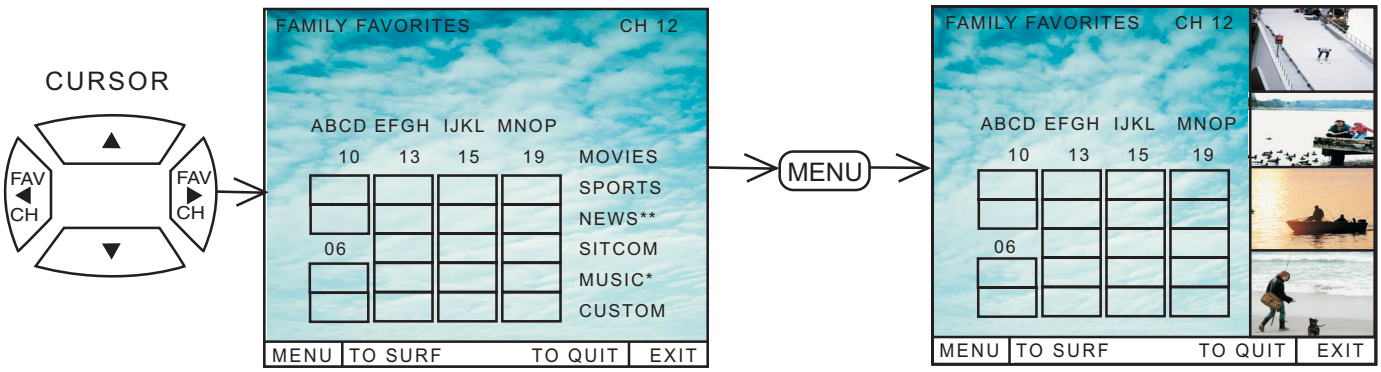
To rename the categories, use the CURSOR buttons to highlight the category you would like to rename.
Use CURSOR ▲ or ▼ to change a letter and CURSOR ► to select the next character to change.

To reset categories and channels back to original factory preset, press RECALL while you are renaming a category.

If a CHANNEL ID is set for the channel at the top of each column, it will be displayed above that column.

FAMILY FAVORITES (OPERATION)

Use this function to display FAMILY FAVORITES selections to tune the main picture to a desired favorite channel.



Once your favorite channels are registered in the FAMILY FAVORITES menu, your PC ready color TV set will change to that station when selected.
Select a category using CURSOR ▲ or ▼ buttons.
Use CURSOR ◄, ►, ▲ or ▼ buttons to highlight a favorite channel and the PC ready color TV will automatically tune to that channel.
Press EXIT to remove FAMILY FAVORITES OSD from the screen.

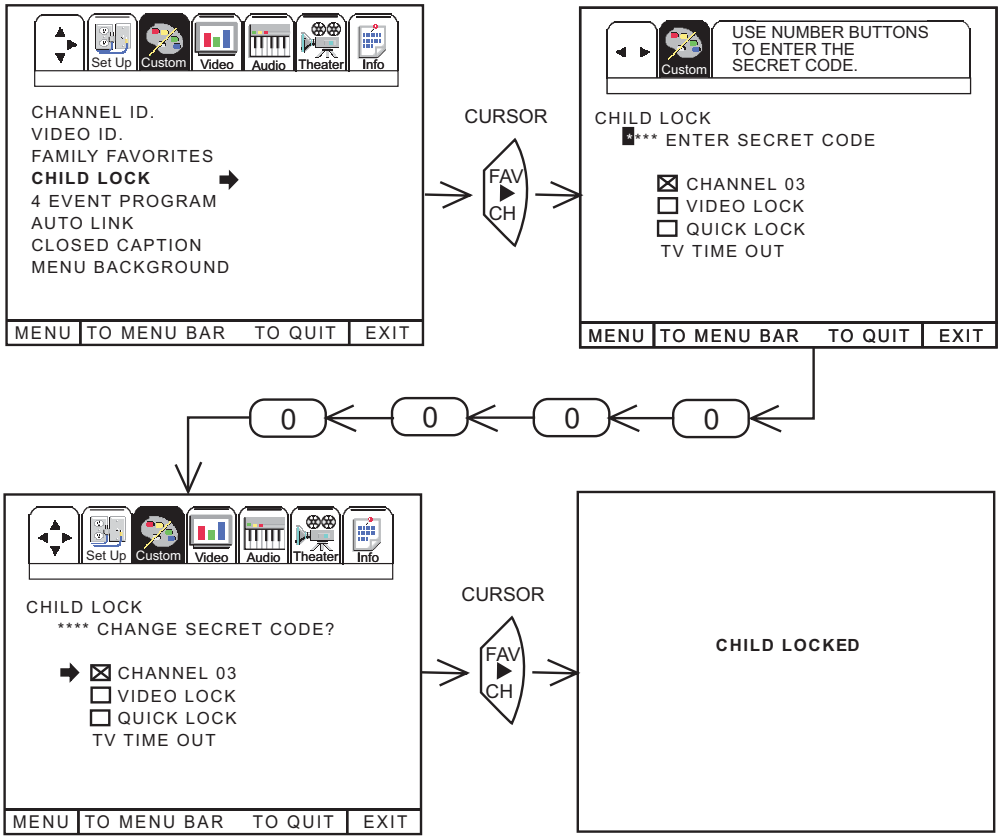
NOTE: After all of your favorite channels are registered, the CURSOR buttons can be used for quick access to the FAVORITE CHANNELS menu

CUSTOM

CHILD LOCK

This feature allows you to block out the picture and sound of the selected channel or video input of any channel that you feel may be inappropriate for your children. There is no limit to the number of channels that can be locked. Your secret code allows you to reinstate these channels any time you wish. It can also be used to schedule an amount of time that the PC ready color TV cannot be viewed.

The code to enter CHILD LOCK is a four digit secret code number. The factory preset code is 0000.
Use the number buttons to select secret code.



Use CURSOR ▲ or ▼ to highlight function and the CURSOR ▶ button to set ON or OFF.

When CHANNEL is turned on, the picture and sound for the chosen channel will be blocked out.

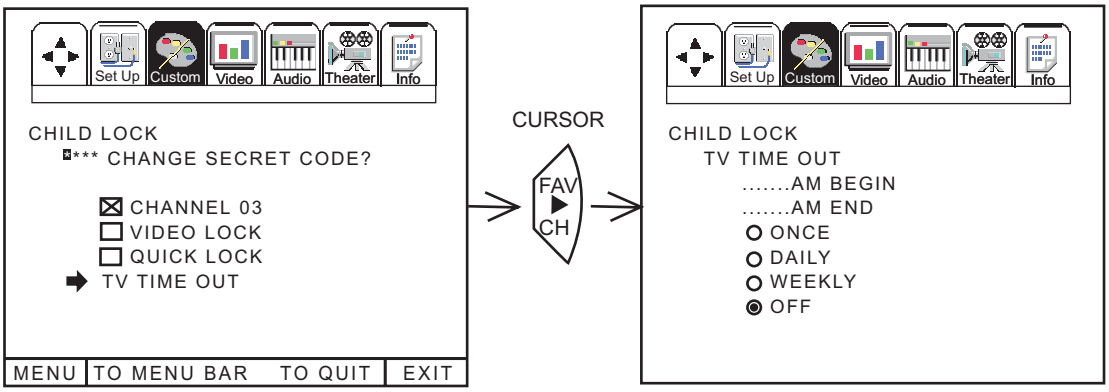
When VIDEO LOCK is turned on, the picture and sound for all video inputs will be blocked out. To lock the video inputs, you must be tuned to any video input.

When QUICK LOCK is turned on, the picture and sound for channels 3, 4 and all video inputs will be blocked out.

When TV TIME OUT is turned on, you can set the BEGIN and END times and the PC ready color TV cannot be viewed during that time period. (Set clock first.) Use CURSOR ▲ or ▼ to highlight ONCE (PC ready color TV will time out one time only), DAILY (PC ready color TV will time out every day), WEEKLY (PC ready color TV will time out one time a week) or OFF (to disable this function) and then press cursor ▶ to select your choice.

NOTE: CHILD LOCK is not available in PC MODE.

CHILD LOCK



Press CURSOR ▲ or ▼ to select the time to begin.
Press CURSOR ▶ to select hour, minutes and AM/PM.
Press CURSOR ▲ or ▼ to set the time to begin.
Press CURSOR ◀ then CURSOR ▼ to select time to end.
Press CURSORS ▲ or ▼ to set time to end.
Press CURSOR ◀ to exit time end.
Press CURSORS ▲ or ▼ to select once, daily, or weekly.

To change the secret code number, select CHANGE SECRET CODE. Enter a new four digit key number you prefer.

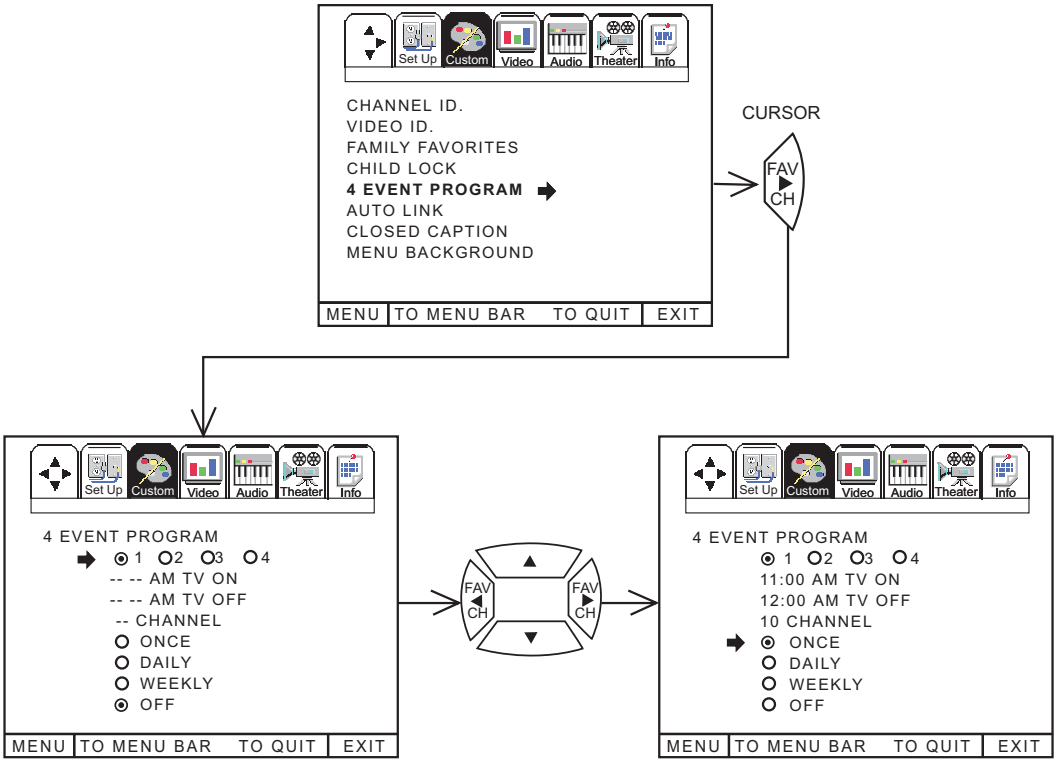
If you forget your secret code, use the factory code 7777 to erase your key number. This will reset the secret code number back to the factory preset 0000.

Press EXIT to quit menu or cursor ◀ to return to previous menu.

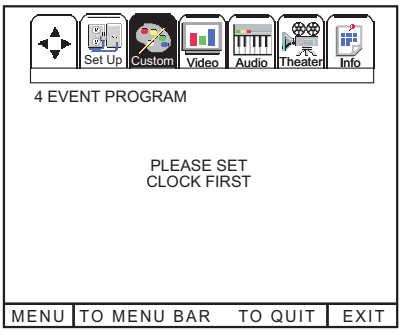
NOTE:
1. When using TV TIME OUT make sure the clock is set (see page 39).
2. When the recall button is pressed, a special icon appears on the screen and indicates that CHILD LOCK is activated.

CUSTOM

4 EVENT PROG. This function will automatically turn the TV on and off, one time only, every day or once a week.



Press CURSOR ▶ to select PROGRAM 1, 2, 3, or 4.
Press CURSOR ▲ or ▼ to select the time the PC ready color TV will turn on and off.
Use CURSOR ▶ to change position.
Press CURSOR ▲ or ▼ to highlight then CURSOR ▶ to select MODE: ONCE (PC ready color TV will turn on/off one time only) or MODE: DAILY (PC ready color TV will turn on/off at the same time every day), or MODE: WEEKLY (PC ready color TV will turn on/off at same time every week) and MODE: OFF (to disable this function).
Press CURSOR ▲ or ▼, CHANNEL (▲) or (▼), or number buttons to set the channel the PC ready color TV will tune to when it automatically turns on.
Press EXIT to quit menu or cursor ◀ to return to previous menu.
If the clock is not set, you can not use this function and the screen below will appear.

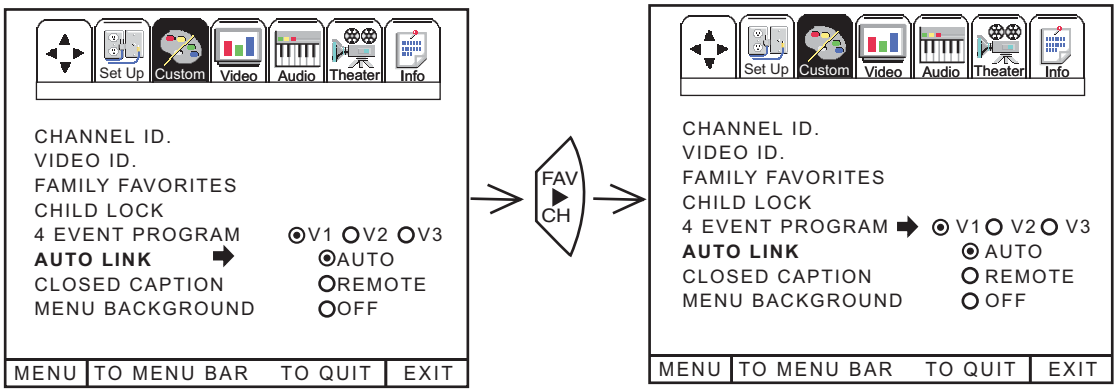


NOTE:
1. The OFF Timer will only activate if the PC ready color TV was turned on or tuned with the ON Timer and no channel selection was made after this time. If you change the channel after the ON Timer has been activated, the OFF Timer will deactivate.
2. If no remote control button is pressed after ON Timer is activated, the PC ready color TV will automatically turn off after three hours.

CAUTION: Do not use your PC color ready TV as a deterrent when away from home by using the ON and OFF TIMERS. For safety, the PC color ready TV should be turned off when you are away from home.

CUSTOM

AUTO LINK Use this function to automatically turn the PC ready color TV on and tune to VIDEO: 1, 2, or 3, when it detects a VIDEO input.



Use CURSOR ▶ to select Video Input.
Use CURSOR ▲ or ▼, then CURSOR ▶ , to change AUTO LINK setting.

When AUTO is selected, the PC ready color TV will turn on and tune to VIDEO: 1, 2, or 3 automatically, when the VIDEO: 1, 2, or 3 input device is turned on. This is convenient when you want to watch a movie with your VCR, laserdisc player, or DVD player.

When REMOTE is selected, the PC ready color TV will turn on and tune to VIDEO: 1, 2, or 3 automatically, when the VIDEO: 1, 2, or 3 input device is turned on and the VCR, laserdisc, or DVD play button on your remote control is pressed.
This is convenient when you want to record a movie with your VCR and watch it later.

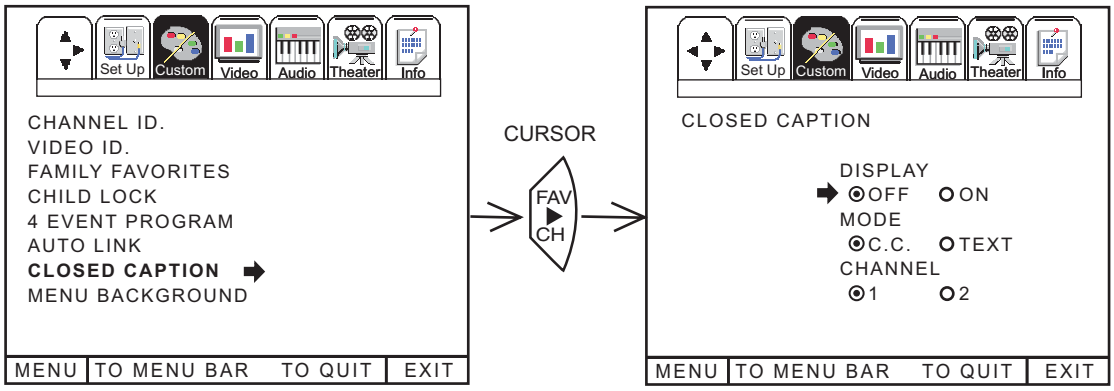
Select OFF to disable this function.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

NOTE:
1. Once the PC ready color TV has been turned on using the AUTO LINK feature, it must be reset before AUTO LINK is used again. To do this, turn your VCR, laserdisc, or DVD player OFF. This feature is now reset and will turn on your PC ready color TV as described above.
2. When using REMOTE mode, any remote control button will substitute for your video input device play button. However, intended operation is for use with your VCR, laserdisc, or DVD play button.

CUSTOM

CLOSED CAPTION

Closed captions are the dialogue, narration, and/or sound effects of a television program or home video which are displayed on the PC ready color TV screen. Your local TV program guide denotes these programs as CC or .



DISPLAY: **ON/OFF** will turn the CC or display on or off.

MODE: **C.C.** (Closed Caption) is for the program you are viewing.

TEXT is for additional information such as news reports or a TV program guide. This information covers the entire screen and viewing the PC ready color TV program is not possible. TEXT may not be available with every CC or program.

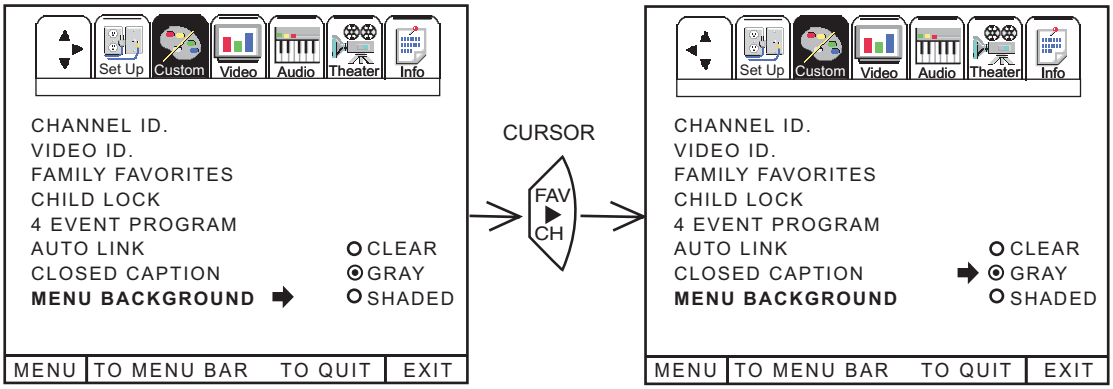
CHANNEL: **1** is used for the primary language (usually English).
2 is sometimes used for a second language (may vary by region).

Use CURSOR ▲ or ▼ to highlight the function to change then press CURSOR ▶ to change the function.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

NOTE: If you do not have sound, make sure MUTE is not set.

MENU BACKGROUND

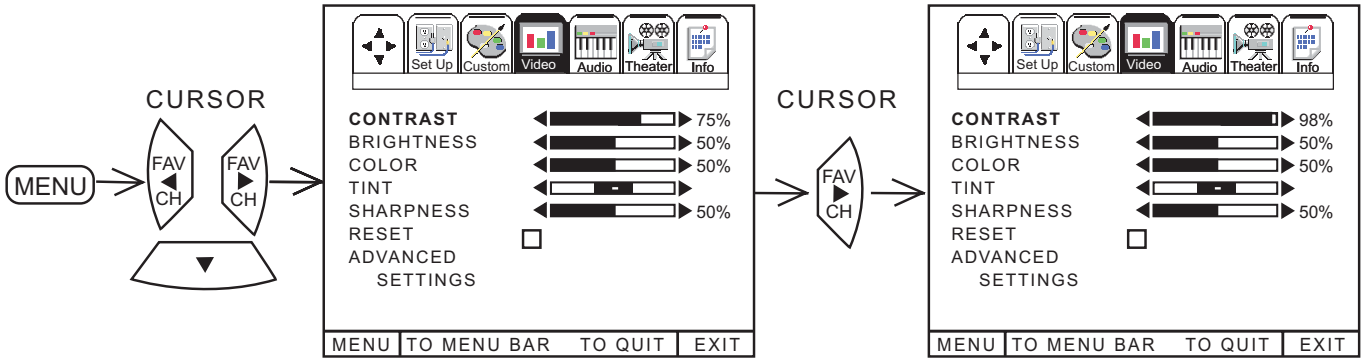
This function allows you to choose from three menu backgrounds.



Use CURSOR ▲ or ▼ to change MENU BACKGROUND setting.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu.
Select CLEAR and no background is visible, select GRAY and a gray background is visible (no picture can be seen behind menu screen), select SHADED and a light background is visible.

VIDEO

Select VIDEO to adjust picture settings and improve picture quality.



Use the CURSOR ▲ or ▼ buttons to highlight the function to be adjusted.
Press the CURSOR ◄ or ► buttons to adjust the function.
Press EXIT to quit menu, or CURSOR ◄ to return to previous menu.

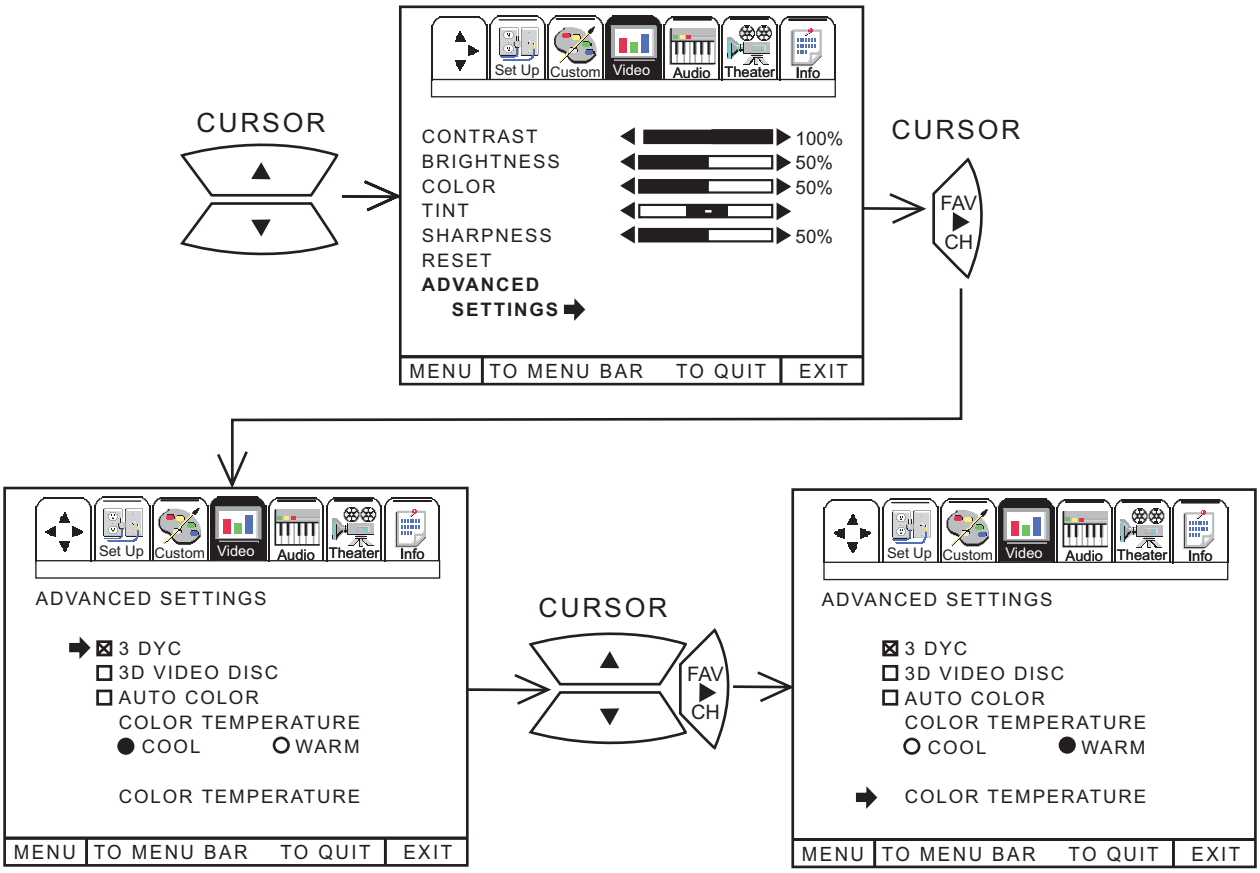
NOTE:
- If CONTRAST is selected, you are adjusting CONTRAST. The additional menu items BRIGHTNESS, COLOR, TINT, and SHARPNESS can be selected and adjusted in the same manner.
- Contrast and Brightness adjustments will affect only the main picture. These adjustments will not affect the sub-picture.

CONTRAST	Use this function to change the contrast between black and white levels in the picture.
BRIGHTNESS	Use this function to adjust overall picture brightness.
COLOR	Use this function to adjust the level of color in the picture.
TINT	Use this function to adjust flesh tones so they appear natural. (It may be necessary to adjust TINT to obtain optimum picture quality when using the COMPONENT: Y-P_BP_R/Y-C_BC_R Input 2 jacks).
SHARPNESS	Use this function to adjust the amount of fine detail in the picture.
RESET	When RESET is selected, the ARE YOU SURE? display will appear on the screen to confirm your choice. Press CURSOR ► to return VIDEO adjustments to factory preset conditions.

VIDEO

ADVANCED SETTINGS

Your PC ready color TV has the following functions which will adjust picture settings to produce the highest quality picture possible.



Use CURSOR ▲ or ▼ to select function.
Use CURSOR ▶ to change the function setting. When the function has an X in the box, it is ON.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

3DYC (DIGITAL 3DYC COMB FILTER)
The 3DYC function automatically turns on the 3 Dimension Luma and Chroma filter. This lessens the dot crawl and cross color. Turn on 3DYC to eliminate flickering, or picture artifacts, that a detailed pattern or scene would normally cause. (See page 78).

3D VIDEO DISC
Turn on for 3D Video programs. Use this mode only when input signal is 3 Dimension. If activated and PC ready color TV turns off, 3D video disc is deactivated.

AUTO COLOR
The AUTO COLOR function automatically monitors and adjusts the color to maintain constant color levels even after a program or channel changes. It also maintains natural flesh tones while preserving fidelity of background colors.

NOTE: It may be necessary to set AUTO COLOR-ON to obtain optimum picture quality when using the COMPONENT: Y-C_BC_R/Y-P_BP_R Input 2 jacks.

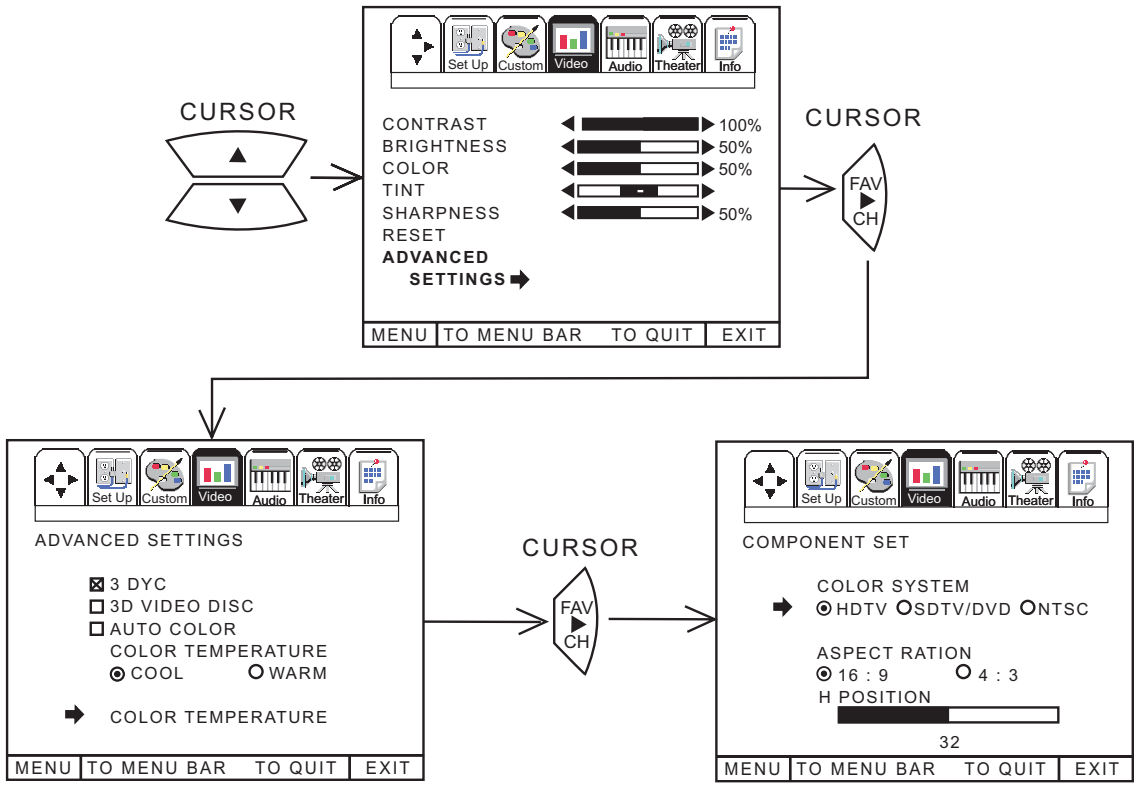
COLOR TEMPERATURE
Use this function adjust the white balance (hue) of the picture to your own color preference.
Set this to WARM for hotter colors with more red, or set to COOL for less intense colors with more blue.

VIDEO

ADVANCED SETTINGS

COMPONENT SET

The COMPONENT SET function is very useful when setting up High Definition, Standard Definition and NTSC signal while changing the aspect ratio and moving the Horizontal Position.



Press CURSOR ▶ to select Color System (HDTV, SDTV/DVD, NTSC).
Press CURSOR ▼ to change position.
Press CURSOR ▲ or ▼ to highlight then CURSOR ▶ to select ASPECT RATIO (16 : 9, 4 : 3).
Press CURSOR ▼, ▶ to highlight then CURSOR ▶ to select H Position.

NOTE: Set up a Component Signal and switch to Video 2 by pressing the Input Button on the Remote Control when planning to use the component set function.

COLOR SYSTEM

The COLOR SYSTEM function allows you to change tint and color coordinate for DTV Programs.

HDTV - High Definition Television - Use for High Vision Signal Y-P_BP_R from HDTV Set-Top Box.

SDTV/DVD - Standard Definition Television or Digital Video Disc Y-C_BC_R such as DVD (Digital Video Disc Player).

NTSC - Basic U.S. Standard Normal Signal Standardized by the National Television Standard Committee.

ASPECT RATIO

16 : 9 - Screen changes to 16 : 9 aspect ratio.
HDTV signal is normally 16 : 9 aspect ratio.

4 : 3 - Screen changes to 4 : 3 aspect ratio.
SDTV and NTSC signals are normally 4 : 3 aspect ratio.

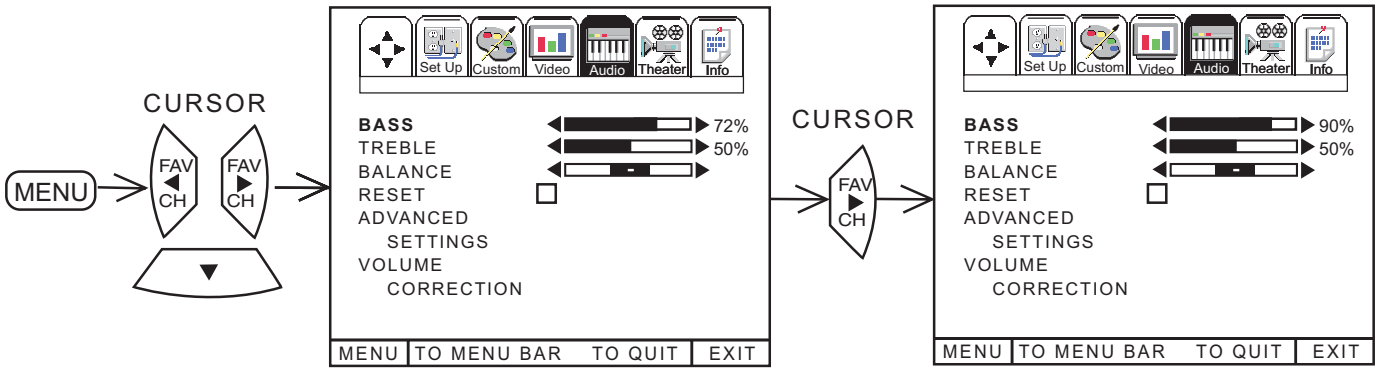
H POSITION

This function allows you to adjust the Horizontal Position on DTV mode. This is convenient when using SET TOP BOX.

NOTE: Refer to page 78 for Feature Information.

AUDIO

Select AUDIO SETTINGS to adjust the PC ready color TV to your preference and to improve the sound quality.



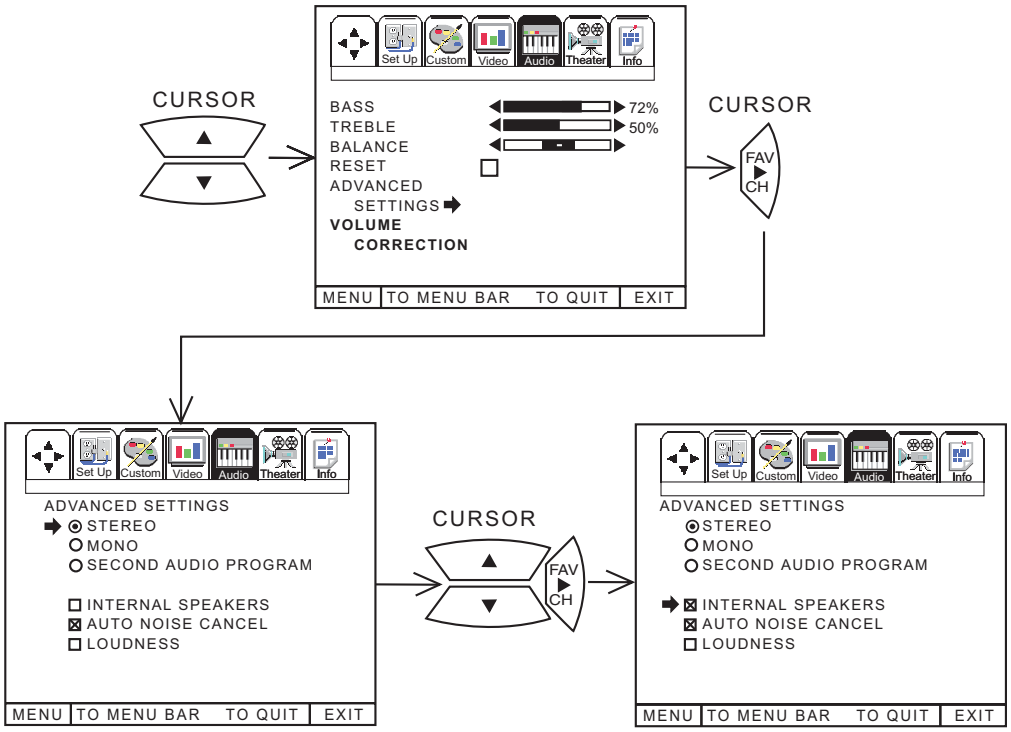
Use CURSOR ▲ or ▼ to highlight the function to be adjusted.
Press CURSOR ◄ or ► to adjust the function.
Press EXIT to quit menu or cursor ◄ to return to previous menu.

NOTE: If BASS is selected you are adjusting BASS. The additional menu items TREBLE and BALANCE can be selected and adjusted in the same manner.

BASS	This function controls the low frequency audio to all speakers.
TREBLE	This function controls the high frequency audio to all speakers.
BALANCE	This function will control the left to right balance of the TV internal speakers and the AUDIO TO HI FI output.
RESET	When RESET is selected, the ARE YOU SURE? display will appear on the screen to confirm your choice. Press CURSOR ► to return AUDIO adjustments to factory preset conditions.

ADVANCED SETTINGS

Use ADVANCED SETTINGS to improve the sound performance of your PC ready color TV, depending on listening conditions.



Press CURSOR ▲ or ▼ to highlight a function. Press CURSOR ▶ to change the function setting. When the function has an X in the box, it is ON. Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

MTS MODE

Multi-Channel Television Sound (MTS) will allow you to select STEREO (a Stereo Broadcast), MONO (Monaural Sound) used when receiving a weak stereo broadcast or SAP (Second Audio Program) which may be a secondary language, weather report, etc. The sources received will be displayed at the top center edge of the PC ready color TV. The source you select will be displayed above the sources received. See example below for each selection when both stereo and second audio are received (monaural is always received).

STEREO SELECTED

SAP SELECTED

MONO SELECTED

INTERNAL SPEAKERS

This function is useful when first setting up the external speakers, or if you prefer to use only speakers from a separate stereo system.

AUTO NOISE CANCEL

This function eliminates the noise in between stations. If a channel is tuned and is noisy, this function will automatically eliminate the audio for that channel and set to blue screen.

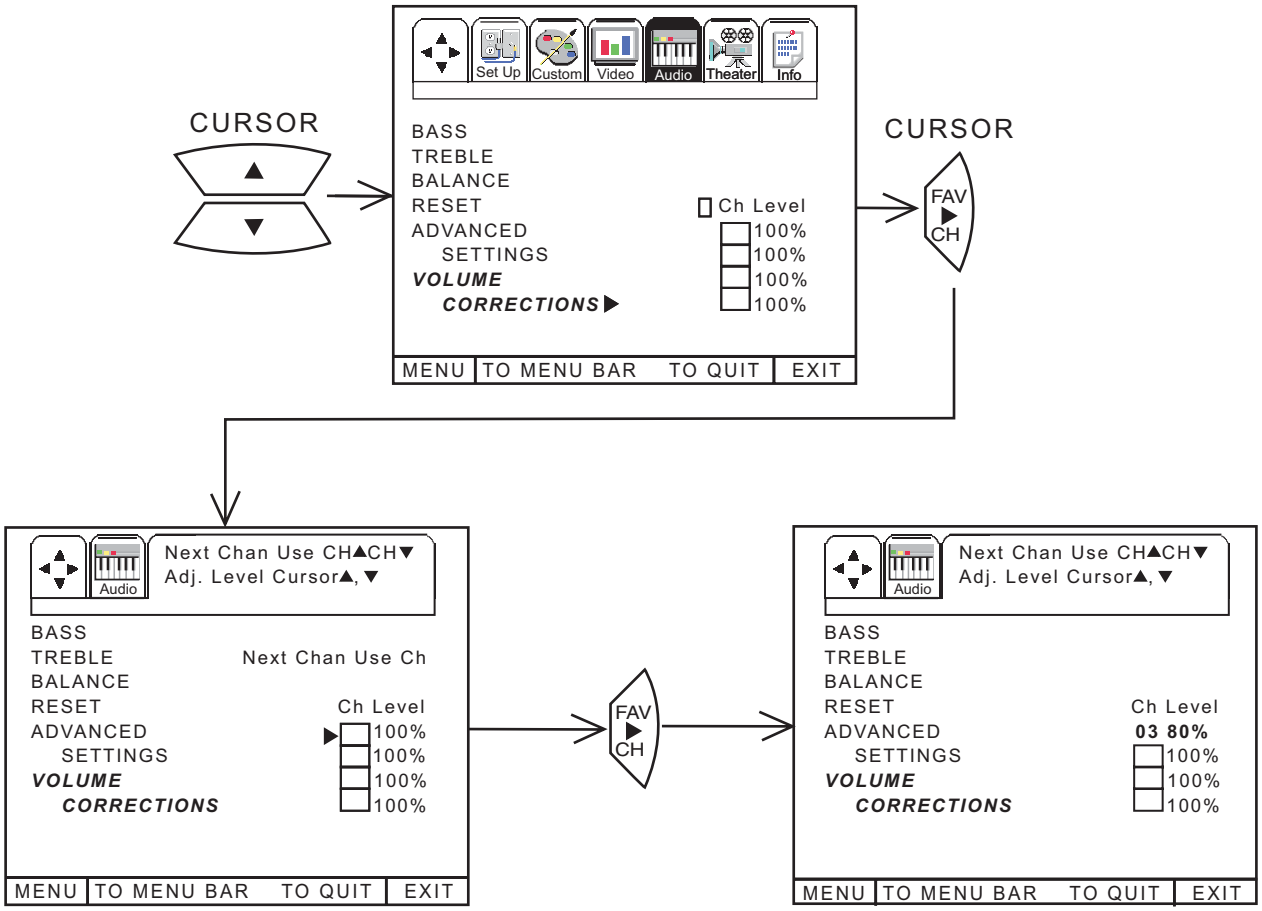
LOUDNESS

This function will improve the quality of both low and high frequency sounds when listening at low volume levels.

AUDIO

VOLUME CORRECTION

Use this function to reduce the volume level of up to four channels that sound loud compared to other channels.



Press CURSOR ▲ or ▼ to highlight one of the four volume corrections, then CURSOR ▶ to select.
Press CHANNEL ▲ or ▼ and number buttons to select a channel.
Press CURSOR ▲ or ▼ to adjust volume level in 5% increments.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

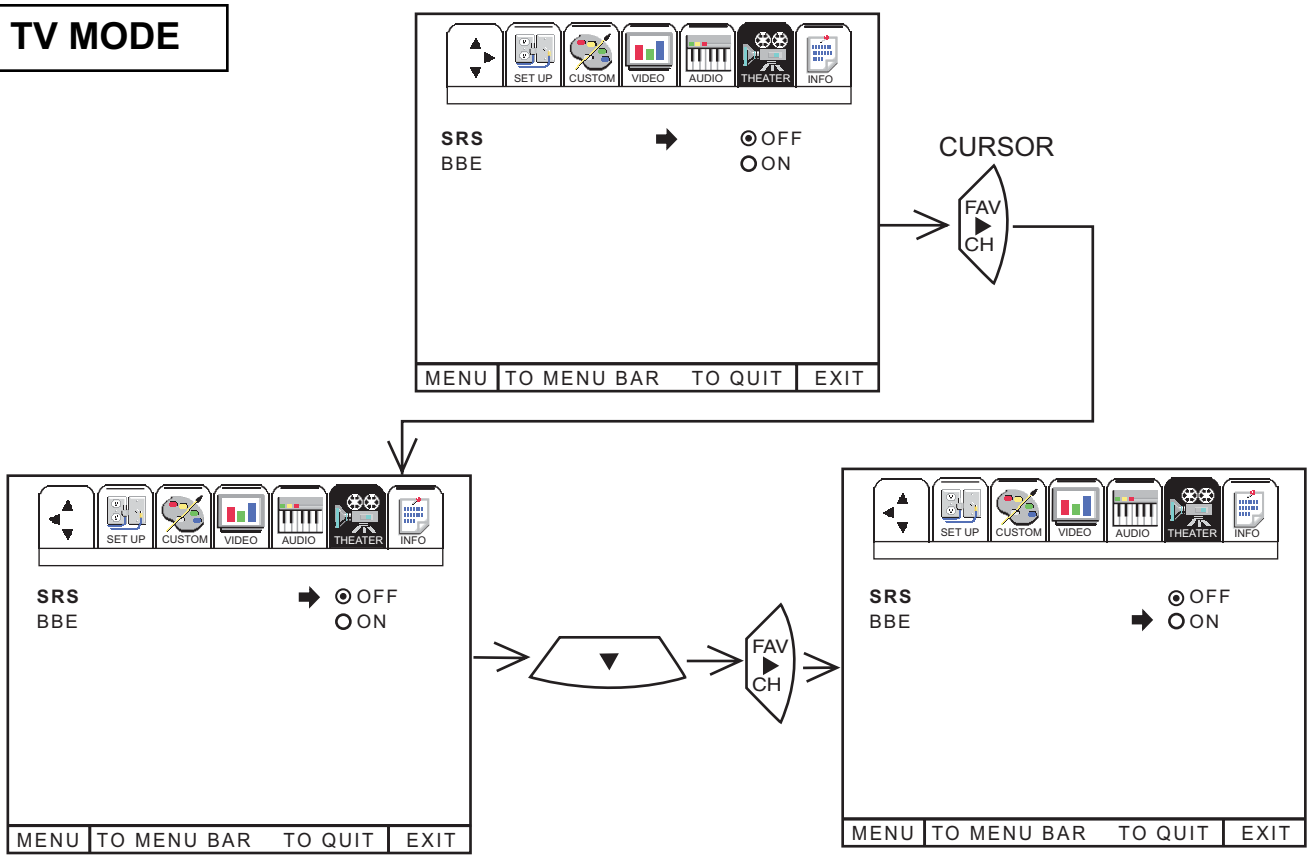
NOTE:

1. Volume Correction adjustment is for the channel display in the top right corner of the screen.
2. If the channel is already set, use CURSOR ▶ to select that channel, then use CURSOR ▲ or ▼ to change the level.
3. To erase a channel from volume correction, select channel 00 and press MENU.
4. The volume level will change from 50% to 100% in increments of 5%.

Use this function to choose audio settings for a true home THEATER experience.

Based on the principles of the human hearing system, SRS technology delivers an exciting and realistic 3D Sound experience from just two speakers (or) the two internal speakers of your HITACHI PC ready color television. If your HITACHI PC ready color television is connected to an external audio system, SRS will also create an incredible 3D sound experience from two speakers and even enhance a complete multi-speaker surround sound system.

TV MODE



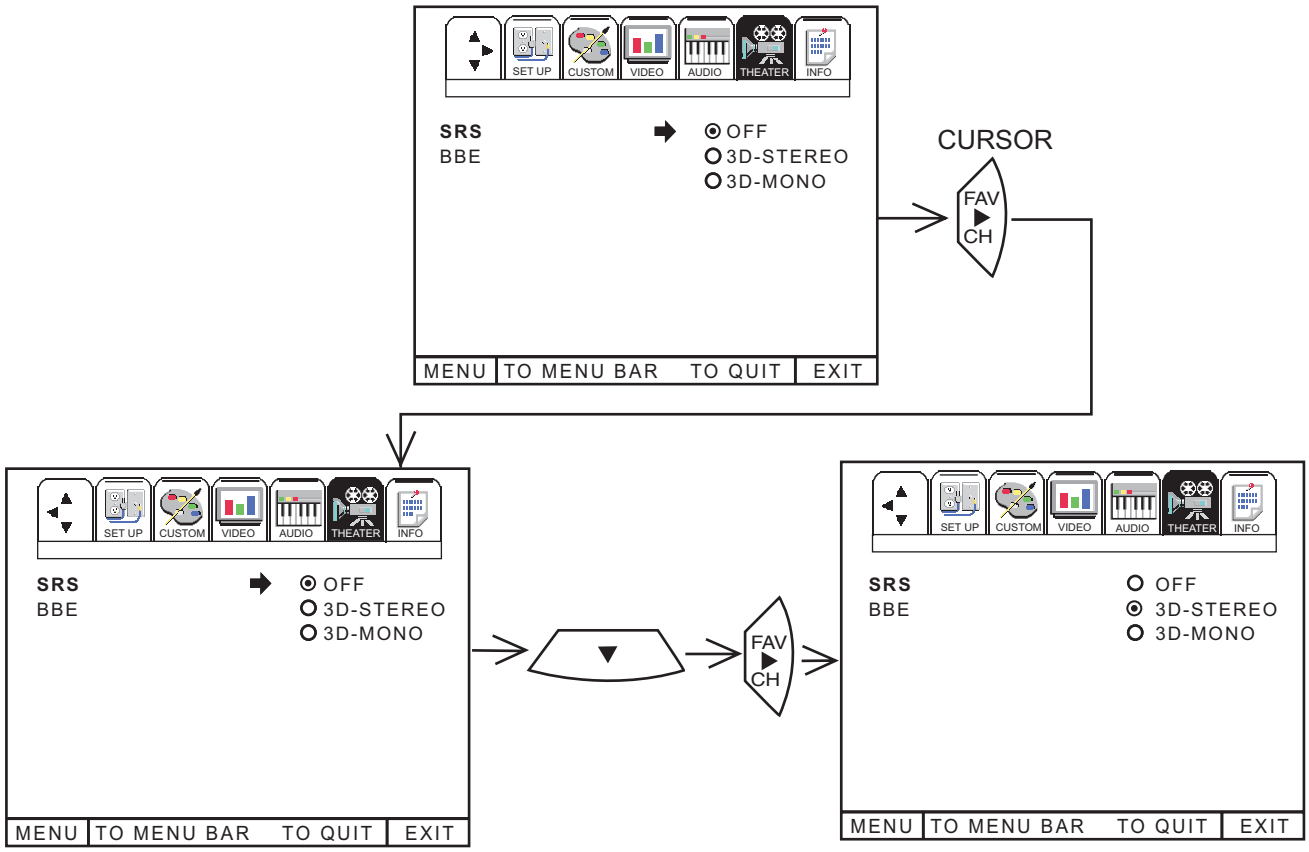
NOTE: TV Mode - This mode is when Input selection is on Antenna or Cable.

NOTE: SRS, the SRS symbol and Sound Retrieval System are registered trademarks of SRS Labs, Inc. in the U.S. and selected countries. SRS Technology is manufactured under license from SRS Labs, Inc. and is protected by USA patents 4,748,669 and 4,841,572 and additional patents worldwide.

NOTE: Refer to page 78 for Feature Information.

SRS (●)®

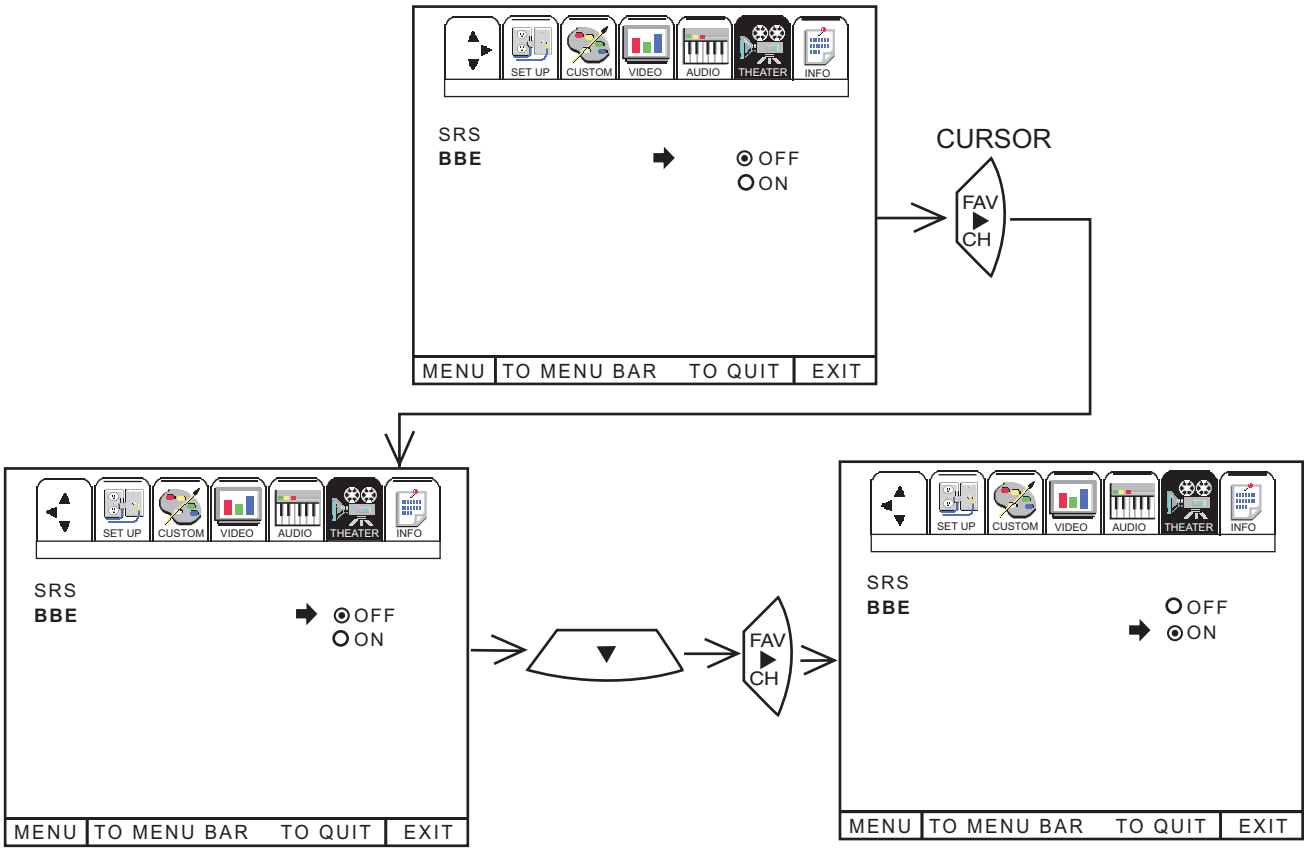
VIDEO MODE



USE CURSOR ▲ or ▼, then CURSOR ▶ to set SRS OFF, 3D-STEREO or 3D-MONO.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

NOTE:	VIDEO MODE - This mode is when Input selection is from VIDEO Inputs.

Sound reproduction quality enhancement system. The BBE technology produces sound that is natural and crisp from just two speakers (or) the two internal speakers of you HITACHI PC ready color television. If your HITACHI PC ready color television is connected to an external audio system, BBE will also create an incredible crisp sound experience from two speakers and even enhance a complete multi-speaker surround sound system. BBE brings to the listener s ear a more complete and accurate reproduction of the original performance. Each voice, speaking or singing, each instrument or sound effect is presented with its attendant harmonics or partials more clearly audible. The ear can then more easily recognize the unique tonal colors of each sound as though the sound was being produced live.



Use CURSOR ▲ or ▼, then CURSOR ▶ to set BBE ON or OFF.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

NOTE:	BBE functions the same manner on TV mode and on VIDEO mode.

NOTE:	The mark BBE and the BBE symbol are trademarks of BBE Sound, Inc. Manufactured under liscense from BBE Sound, Inc. US pat. 4,638,258, 4,482,866 and 5,510,752.

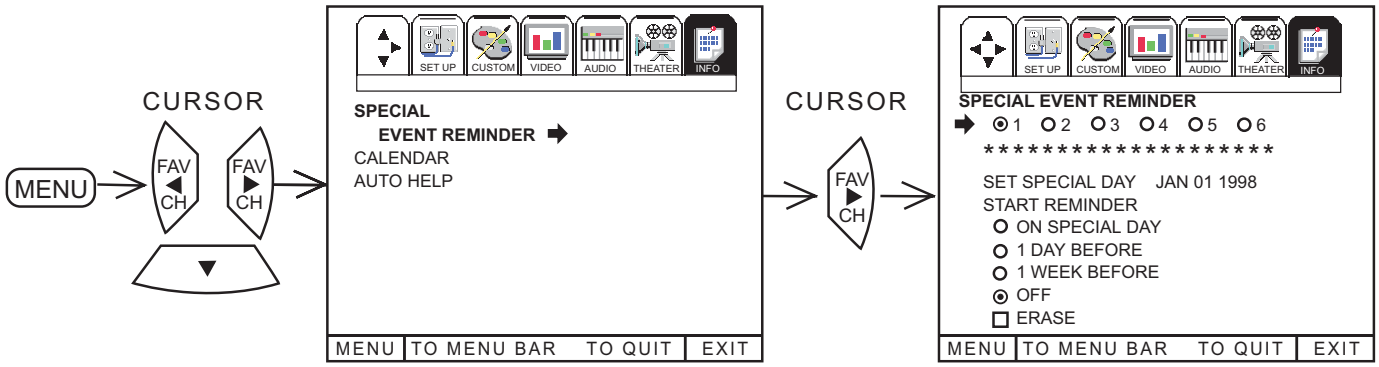
NOTE:	Refer to page 78 for Feature Information.

INFO

This function allows your PC ready color TV to assist you with your busy day-to-day schedule.

SPECIAL EVENT REMINDER

Use this function to set up to six special events into memory.
These events can then be viewed in CALENDAR mode.



Press CURSOR ▶ to select EVENT 1 to 6.
Press CURSOR ▲ or ▼ to select a letter.
Press CURSOR ▶ to change position.
Set Special Day of reminder using cursor buttons.

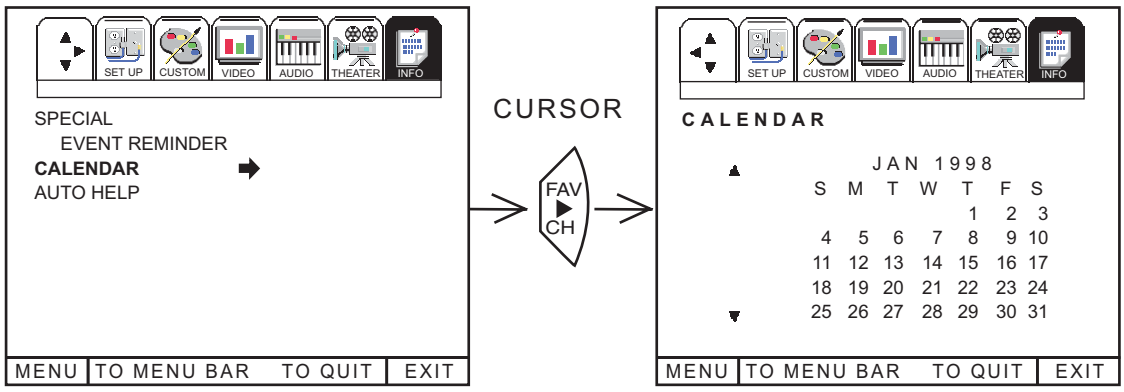
Highlight the day of Start Reminder using CURSOR buttons, then press CURSOR ▶ to select.
To erase SPECIAL EVENT, select ERASE EVENT then press CURSOR ▶. When ERASE is selected, the ARE YOU SURE? display will appear on the screen to confirm your choice.
Press EXIT to quit menu or CURSOR ◀ to return to previous menu.

If the clock is not set, you can not use this function and the next screen will appear.

NOTE:
1. When the PC ready color TV is turned on, the SPECIAL EVENT REMINDER message will automatically appear at the selected time.
2. Each special event message can be a maximum of 20 characters.
3. When the RECALL button is pressed, a special icon appears on the right bottom side of the screen and indicates a SPECIAL EVENT REMINDER message. Press the RECALL button again to display the SPECIAL EVENT REMINDER message.

CALENDAR

Use this function to check the day, month, and year.
Dates programmed in SPECIAL EVENT REMINDER will appear blinking and special event message will be displayed.



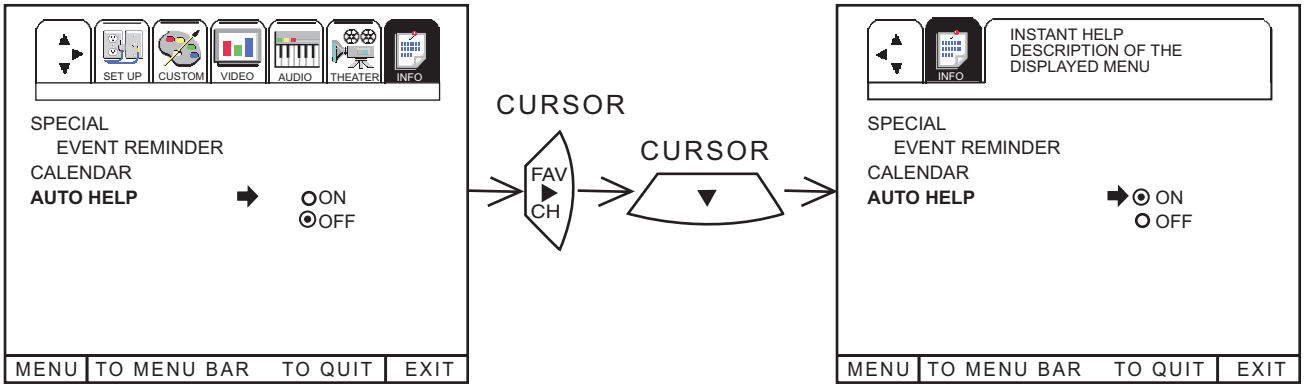
Press CURSOR ▲ or ▼ to change the month.
Press EXIT to quit menu or CURSOR ◄ to return to previous menu.

If the clock is not set, you can not use this function and the next screen will appear.

NOTE: 1. Dates of SPECIAL EVENT REMINDER will appear blinking. Special event message will be displayed only if current date is within the day of Start Reminder Specifications as chosen in SPECIAL EVENT REMINDER. (See page 57).
2. A special icon appears next to CALENDAR when a Special Event Reminder is set.

INFO

AUTO HELP Use this function to display a description of the current menu.



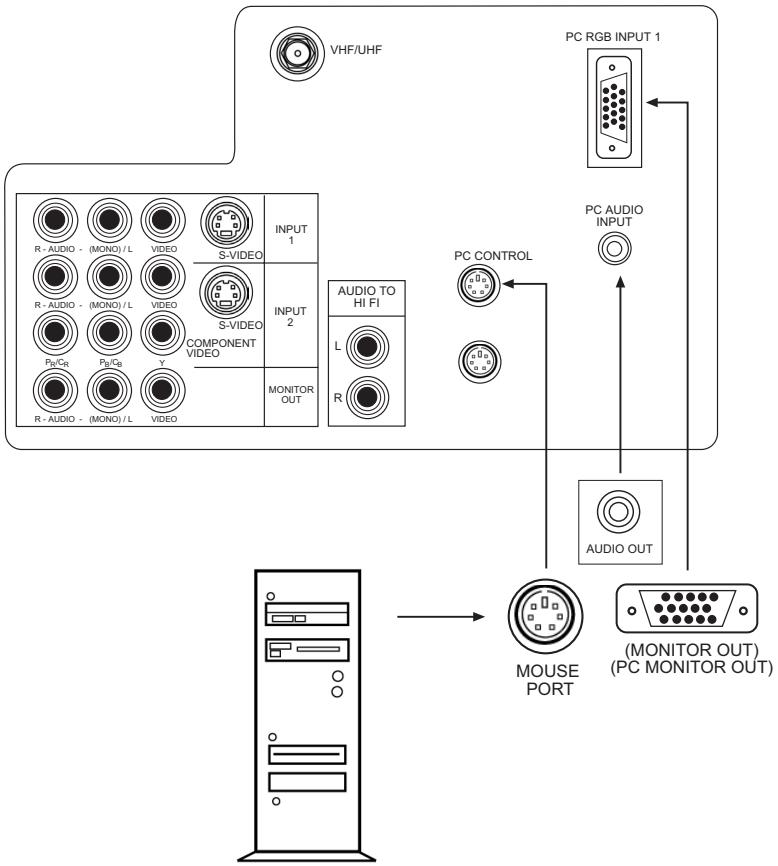
Press CURSOR ▲,▼ to select ON or OFF.
Press EXIT to quit menu or CURSOR ◄ to return to previous menu.

NOTE: You can also turn this function ON and OFF by pressing the HELP button on the remote control.

PC MODE CONNECTION AND OPERATION

IMPORTANT: TURN OFF THE TV/PC MONITOR AND THE PC BEFORE CONNECTING OR DISCONNECTING ANY CABLES.

REAR PANEL CONNECTION TO PC



NOTE: 1. This monitor can display VGA and SVGA formats:

VGA 1 640 X 480 (horizontal frequency: 31.469Khz, vertical frequency: 60.00Hz)
VGA 2 640 X 480 (horizontal frequency: 37.861Khz, vertical frequency: 72.809Hz)
SVGA 800 X 600 (horizontal frequency: 37.879Khz, vertical frequency: 60.317Hz)

LED flashes and PC picture does not appear at all when receiving a signal which is not supported on spec. (See page 11 and 12).

If PC display setting is wrong the monitor will display: Please set PC for 640 x 480 60Hz, 640 x 480 72Hz, 800 x 600 60Hz display.

2. This monitor uses PS/2 format for the mouse interface. On some PC s, the mouse control may not work in the following situations:
   - ¥ Disconnecting and reconnecting mouse cable while PC ready color TV and PC power is turned on.
   - ¥Turning on the PC power before turning on the PC ready color TV power.
   - ¥ Operating systems other than Windows 3.1x and Windows 95.

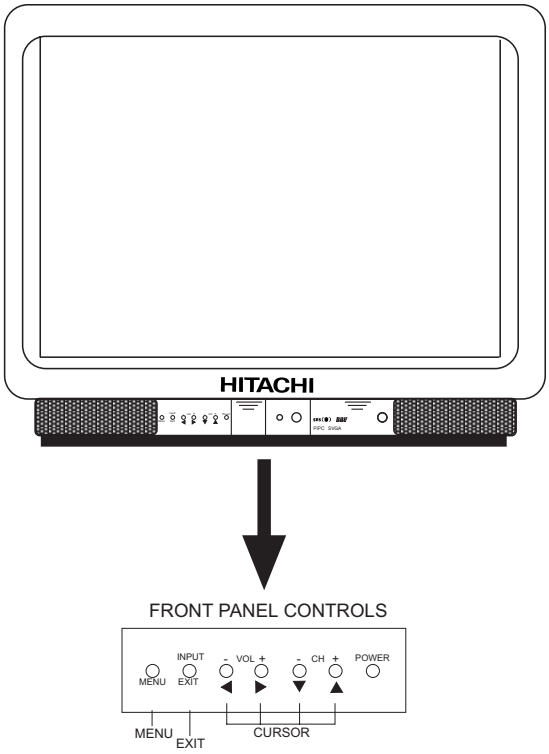
Consult your PC operation manual for the keyboard keys to re-start or shutdown your computer.

NOTE: If PC is set to correct horizontal and vertical frequencies and the picture is out of sync or scrambled, check the video card documentation and set up software to properly set the monitor.

NOTE: The Mini DIN 6 pin keyboard terminal underneath the PC CONTROL at rear panel does not work on this model.

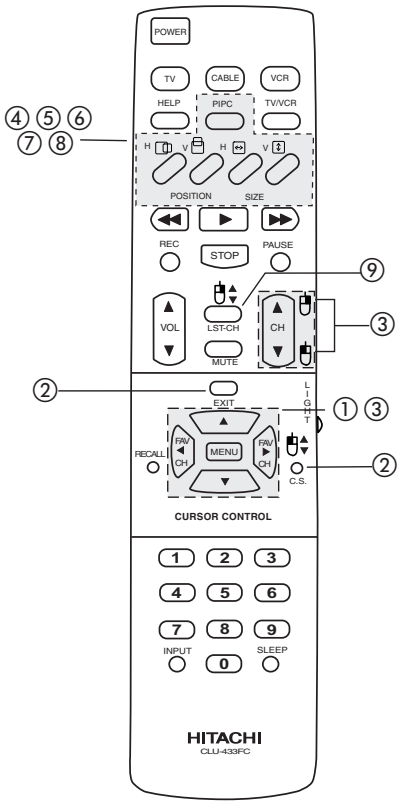
PC MODE CONTROLS

1. FRONT PANEL



2. REMOTE CONTROL

A detailed explanation of the circled numbers follows on page 62.

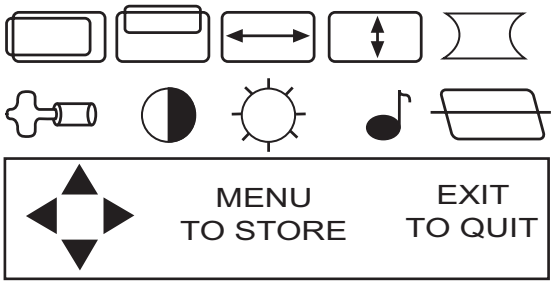


① **MENU Button**

Press MENU to display PC mode On-Screen Display.

PC MAIN MENU

There are ten features that allow you to set up your multimedia vision (while in PC Mode) to your preference. Features are H Position, V Position, H Size, V Size, Pincushion, Set Up, Contrast, Brightness, Audio and Tilt.



After completing adjustment, press MENU to store.

② **EXIT Button**

Press EXIT button to exit the on-screen display.

③ **CURSORS Button**

Use Left/Right cursors to highlight a feature and Up/Down cursors to select the highlighted item, then use left/right cursors to adjust. These buttons are also used for mouse cursor remote control operation.

④ **PinPC Button**

Press this button to go to PinPC mode. This function works on PC mode only.

⑤ **H POSITION Button**

Press to display PC horizontal position adjustment bar. Press cursor left/right to adjust PC horizontal position.

⑥ **V POSITION Button**

Press to display PC vertical position adjustment bar. Press cursor left/right to adjust PC vertical position.

⑦ **H SIZE Button**

Press to display PC horizontal size adjustment bar. Press cursor left/right to adjust PC horizontal size.

⑧ **V SIZE Button**

Press to display PC vertical size adjustment bar. Press cursor left/right to adjust PC vertical size.

⑨ **LAST CHANNEL (LST-CH) Button /**

Press to perform mouse right button drag, toggle.

⑩ **COMMERCIAL SKIP (CS) Button /**

Press to perform left button drag, toggle.

⑪ **CHANNEL UP/DOWN Button /**

Use the channel up (▲) button to perform a right click. Use the channel down (▼) button to perform a left click.

PC MODE CONNECTION AND OPERATION

IMPORTANT: TURN POWER OFF ON THE TV/PC MONITOR AND THE PC BEFORE CONNECTING OR DISCONNECTING ANY CABLES.

PC MOUSE CONTROL OPERATION

1. Connect the 6 pin-din cable (provided) to the PC and monitor as shown on page 60.

2. Turn the TV/PC monitor power on.

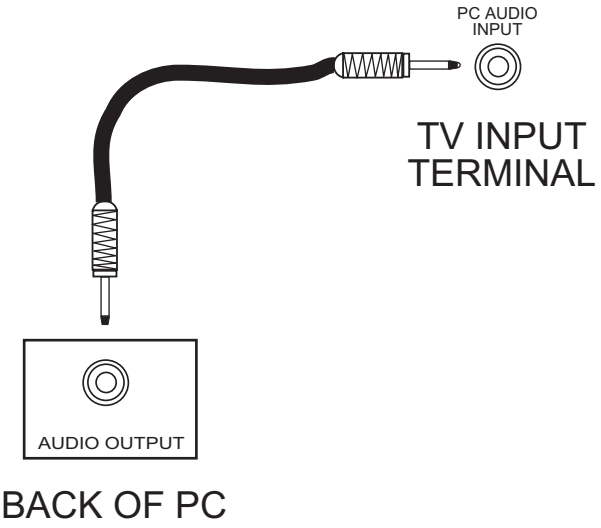
3. Press the input button on the front panel or on the remote control until you select PC mode.

4. Turn the PC power on.

5. After the PC has completed booting, use the cursor buttons on the PC ready color TV front panel or on the remote control to move the mouse cursor up/down/left/ or right to make selections. Use the channel down, channel up, C.S., and LST-CH buttons to perform other mouse functions (see page 60 through 62). ( )

PC AUDIO INPUT OPERATION

1. Connect the audio output of the PC to the PC Audio Input on the TV/PC monitor as shown below.



2. Turn the TV/PC monitor power on.

3. Press the input button on the front panel or on the remote control until you select PC mode.

4. Turn the PC power on.

5. Press volume up (▲) or down (▼) to increase or decrease the sound level.

6. Press the menu button on the TV/PC monitor front panel or on the remote control to display the PC on-screen display.

7. Press the right (▶) or left (◀) cursor buttons to select the audio menu .

8. Press the up(▲) or down (▼) cursor buttons to access the audio adjustment functions.

NOTE: Make sure that the Remote Control is on TV Mode (not VCR or CABLE) when using the Cursor and Mouse control buttons.

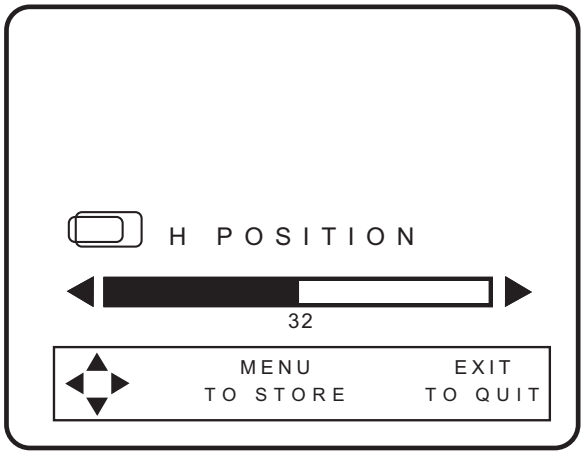
PICTURE ADJUSTMENTS

The following adjustments are independent of the TV mode:

¥Press MENU in PC mode for on-screen display.
¥Press CURSORS right (▶) or (◀) left to highlight the item to be adjusted.
¥Press CURSORS up (▲) or down (▼) to select the highlighted item.
¥Use CURSORS right (▶) or (◀) left to adjust.

H POSITION

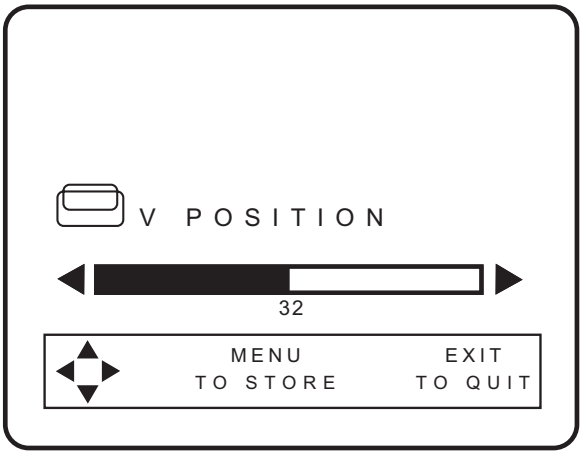
This feature allows you to adjust the horizontal position of the display.



Use Left/Right cursors to adjust the horizontal position.
Press the MENU button to store and EXIT to quit.

V POSITION

This feature allows you to adjust the vertical position in PC mode.

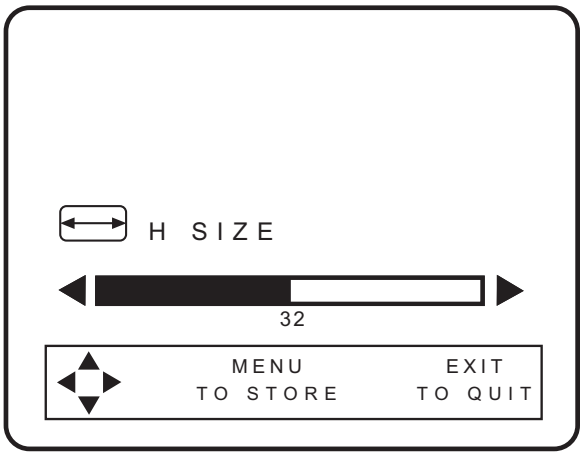


Use Left/Right cursors to adjust the vertical position.
Press MENU button to store and EXIT to quit.

PC ON-SCREEN DISPLAY

H SIZE

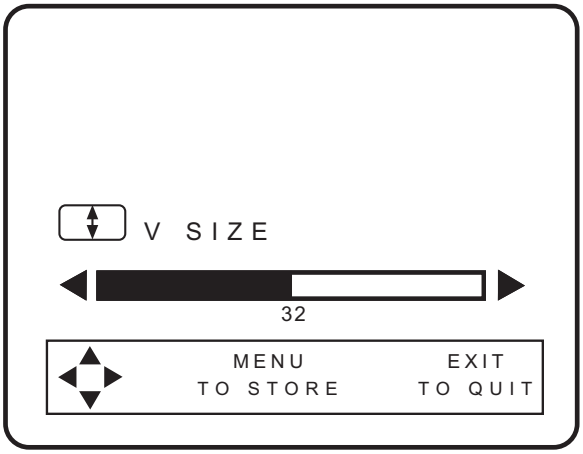
This feature allows you to adjust the horizontal size in PC Mode.



Use Left/Right cursors to adjust the horizontal size.
Press MENU button to store and EXIT to quit.

V SIZE

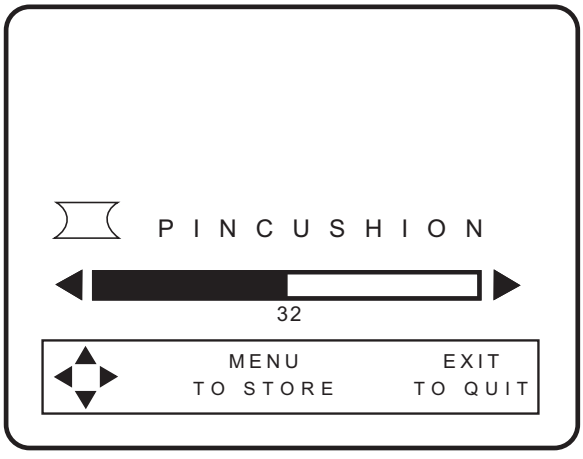
This feature allows you to adjust the vertical size in PC mode.



Use Left/Right cursors to adjust the vertical size.
Press MENU button to store and EXIT to quit.

PINCUSHION

This feature allows you to adjust the left and right sides (pincushion) in PC Mode.



Use Left/Right cursors to adjust pincushion.
Press the MENU button to store and EXIT to quit.

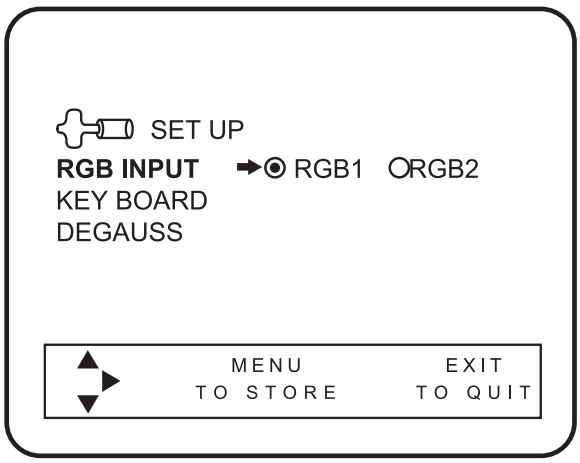
SET UP ADJUSTMENTS

The following adjustments are independent of the TV mode:

¥Press MENU in PC mode for on-screen display.
¥Press CURSORS right ▶ or ◀ left to highlight the item to be adjusted.
¥Press CURSORS up ▲ or down ▼ to select the highlighted item.
¥Use CURSORS right ▶ or ◀ left to adjust.

RGB INPUT

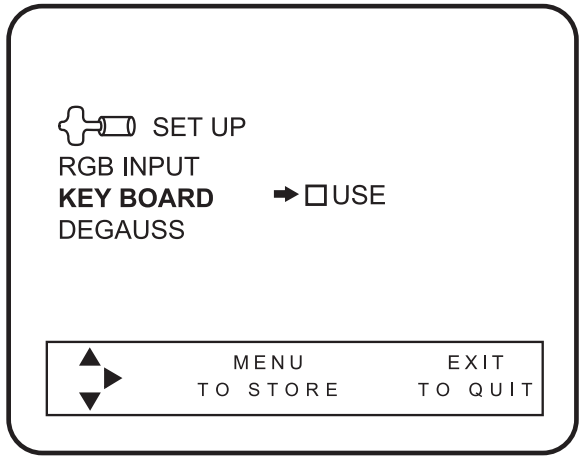
This feature allows you to select PC INPUT between RGB1 or RGB2.



¥ Use right CURSOR ▶ to select between RGB1 or RGB2.
¥ Press MENU button to store and EXIT to quit.
¥ RGB1 when selected, the PC Input will be on the Rear Panel.
¥ RGB2 when selected, the PC Input will be on the Front Panel.

KEYBOARD

This feature allows you to use the Remote Control Keyboard.

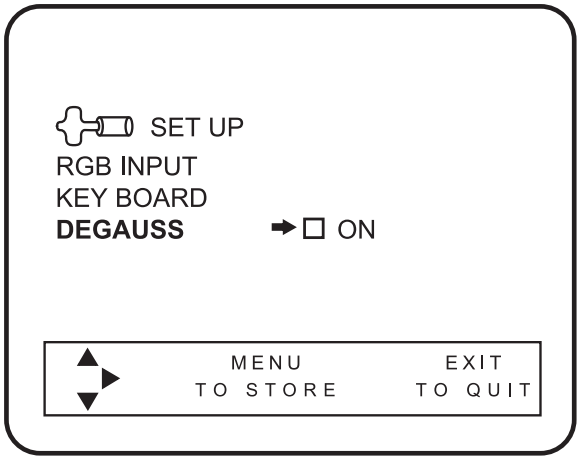


¥ Use right CURSOR ▶ to check when Keyboard will be in use.
¥ Press MENU button to store and EXIT to quit.

NOTE: Please don t check Keyboard USE on PC Set Up Menu, otherwise PC CONTROL will not work. Once you change setting of Keyboard USE of PC Set Up Menu, you better restart PC to refresh PS/2 communication between your set and PC. The Mini DIN 6 pin keyboard terminal on the Rear Panel does not work on this model.

DEGAUSS

This feature allows you to manually Degauss your set.



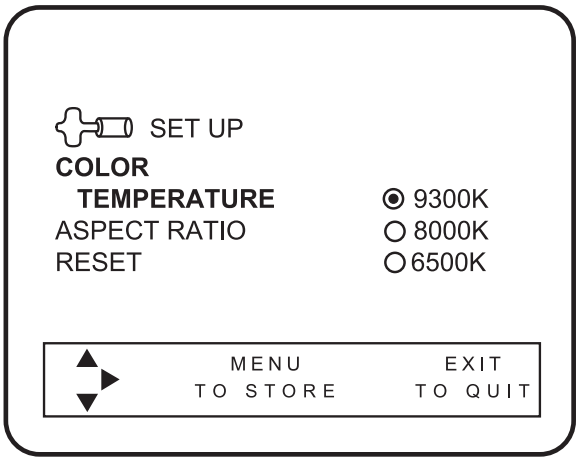
¥ Use right cursor ▶ to check and turn on the Degaussing Coil.
¥ Press MENU button to store and EXIT to quit.
¥ Degauss function is convenient when cleaning any misleading or discolorization in the Picture.
¥ This will momentarily turn on the Degaussing coil then stop when completed.

PC ON SCREEN DISPLAYS

SET UP ADJUSTMENTS Press CURSOR ▼ for more set up adjustments.

COLOR TEMPERATURE

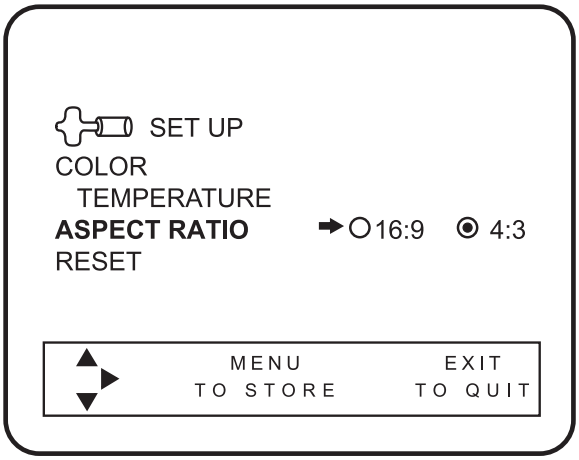
This feature allows you to select your color temperature.



¥ Use CURSOR ▲ or ▼ then CURSOR ▶ to set Color Temperature to 9300¡k, 8000¡k or 6500¡k depending on your preference.
¥ Press MENU button to store and EXIT to quit.

ASPECT RATIO

This feature allows you to select your aspect ratio.

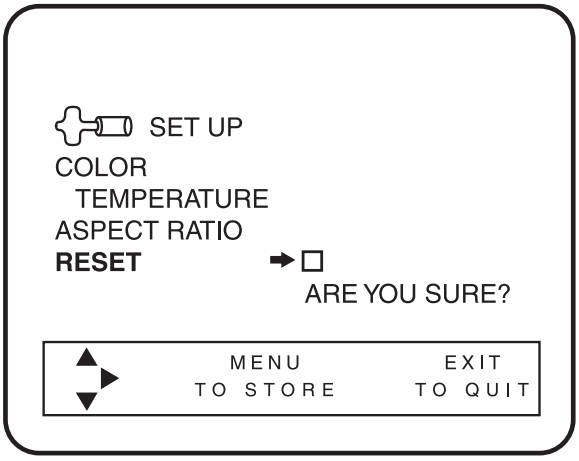


¥ Use CURSOR ▲ or ▼ then CURSOR ▶ to select Aspect Ratio from 16:9 or 4:3.
¥ Press MENU button to store and EXIT to quit.

NOTE: Aspect Ratio at PC Mode can be changed from 4:3 to 16:9 on the following signals ONLY.
VGA 640 x 480, SDTV 480 p, HDTV 1080 i.

RESET

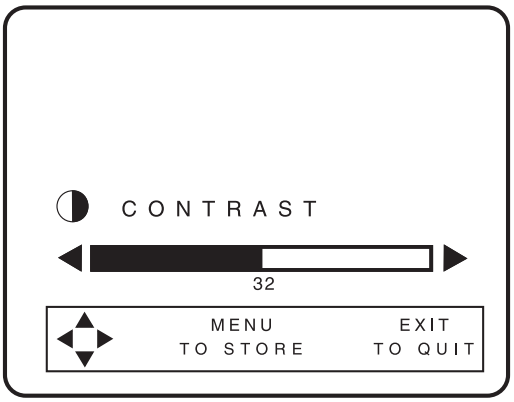
This feature allows you to reset the PC ready color television to the Factory Preset Conditions.



¥ Use CURSOR ▲ or ▼ then CURSOR ▶ to select Reset.
¥ When Reset is selected, the ARE YOU SURE? display will appear to confirm your choice.
¥ Press CURSOR ▶ to return SET-UP Adjustment to factory preset conditions.
¥ Press MENU button to store and EXIT to quit.

CONTRAST

This feature allows you to adjust the contrast in PC mode.

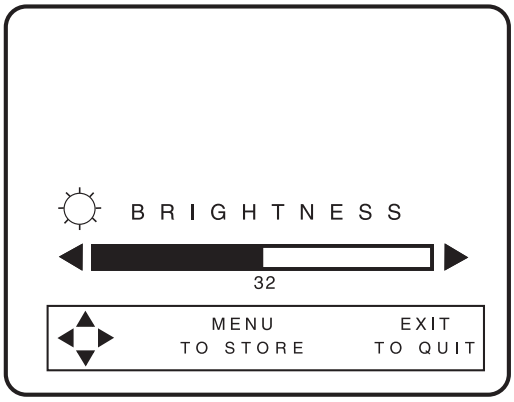


Use Left/Right cursors to adjust contrast.
Press MENU button to store and EXIT to quit.

NOTE: See TV contrast feature for additional information regarding contrast.

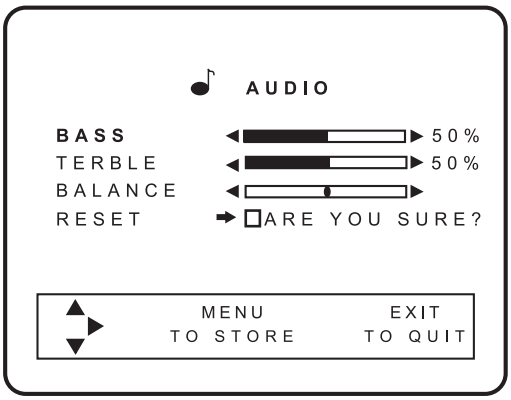
BRIGHTNESS

This feature allows you to adjust brightness in PC Mode.



Use Left/Right cursors to adjust brightness.
Press MENU button to store and EXIT to quit.

PC AUDIO OPERATION



Use the CURSOR ▲ or ▼ to highlight the function to be adjusted.

Press CURSOR ◄ or ► to adjust the function.

Press MENU button to store and EXIT to quit.

BASS
This function controls the low frequency audio to all speakers.

TREBLE
This function controls the high frequency audio to all speakers.

BALANCE
This function will control the left to right balance of the TV internal speakers and the AUDIO TO HI FI output.

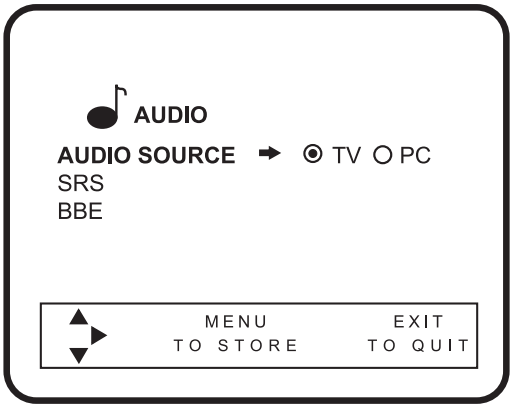
NOTE: TV mode and PC mode AUDIO have the same effect.

RESET
When RESET is selected, the ARE YOU SURE? display will appear on the screen to confirm your choice. Press CURSOR ► to return AUDIO adjustments to factory preset conditions.

Press CURSOR ▼ for more AUDIO ADJUSTMENT.

AUDIO SOURCE

This feature allows you to select Audio Source between TV or PC.

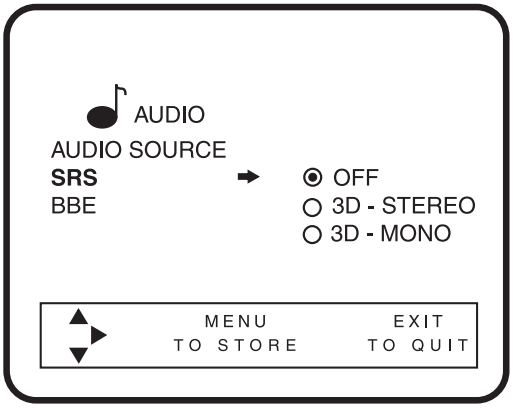


Use CURSOR ▲ or ▼, the CURSOR ► to select AUDIO SOURCE between TV or PC.

Press MENU button to store and EXIT to quit.

SRS

This feature allows you to select SRS in different modes.

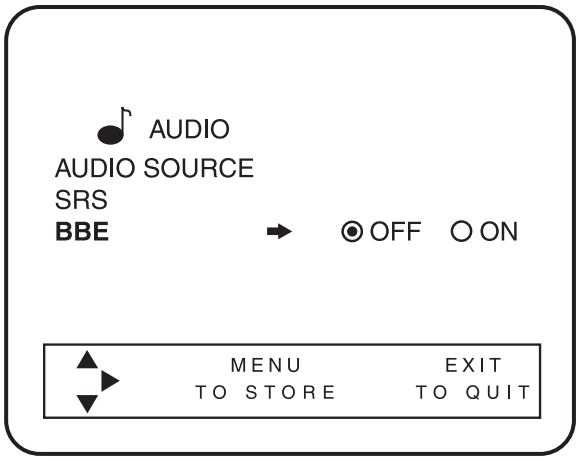


Use CURSOR ▲ or ▼, the CURSOR ► to select SRS - OFF, 3D - STEREO or 3D - MONO.

Press MENU button to store and EXIT to quit.

BBE®

This feature allows you to turn on or off the BBE function.

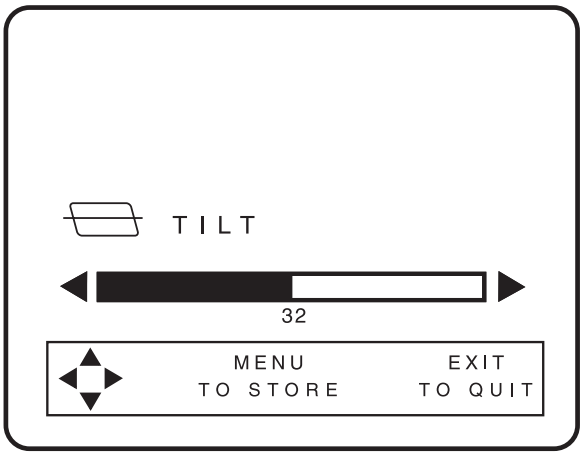


Use CURSOR ▲ or ▼, the CURSOR ▶ to select BBE and turn in on or off.

Press MENU button to store and EXIT to quit.

TILT

This feature allows you to adjust the tilt position of the display.



Use ▶ or ◀ CURSORS to adjust the horizontal position.

Press MENU button to store and EXIT to quit.

NOTE: Tilt control works only on PC mode, it does not work on TV mode.
If you change tilt setting on PC mode, the tilt data on TV mode will change as well.
Please change mode back to PC mode, then adjust tilt control, if you want to adjust it on TV mode.

PLUG and PLAY

PLUG & PLAY

This monitor complies with VESA DDC2B specifications, Plug & Play is a system with computer, peripherals (including monitors), and operating system. It works when the monitor is connected to a DDC ready computer that is running an operating system software that is capable for the plug & play.

When a Plug and Play PC is powered on, it sends a command to the Monitor requesting identification. The Monitor sends back a string of data including its characteristics.

TRADEMARK ACKNOWLEDGMENT
VGA is a registered trademark of International Business Machines Corporation.
Apple and Macintosh are registered trademarks of Apple Computer, Inc.
VESA is a trademark of a nonprofit organization, Video Electronics Standard Association.

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil num rique de la classe B la norme NMB-003 du Canada.

Cable Compatible Television Apparatus- T l vision c blocompatible, Canada.

Note on Closed Caption:
This television receiver will display television Closed Captioning(CC or) in accordance with paragraph 15.119 of the FCC rules.

AGENCY REGULATORY INFORMATION

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

¥ Reorient or relocate the receiving antenna.
¥ Increase the separation between the equipment and the receiver.
¥ Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
¥ Consult the dealer or an experienced radio/television technician for help.

Modifications

The FCC requires the user to be notified that any changes or modifications made to this device that are not expressly approved by Hitachi Home Electronics (America), Inc. may void the user s authority to operate the equipment.

Cables

Connections to this device must be made with shielded cables with metallic RFI/EMI connector hoods to maintain compliance with FCC Rules and Regulations.

Any cables that are supplied with the system must be replaced with identical cables in order to assure compliance with FCC rules. Order Hitachi spares as replacement cables.

Declaration of Conformity

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any cables that are supplied with the system must be replaced with identical cables in order to assure compliance with FCC rules. Order Hitachi spares as replacement cables.

For questions regarding this declaration, contact:

Hitachi Home Electronics (America), Inc.
1855 Dornoch Court
San Ysidro, CA 92173
Tel. 1-800-448-2244 (1-800-HITACHI)
ATTN: CUSTOMER RELATIONS

USEFUL INFO

DO

Make sure the PC ready color TV is turned off when cleaning the screen.

Dust the screen and cabinet with a soft cloth.

Clean the screen with a soft cloth moistened in warm water and dry with a soft cloth. A mild soap may be used if the screen is extremely dirty.

Place your PC ready color TV and remote control away from extreme heat, humidity and extremely dusty places.

Remove the plug from the wall outlet if your PC ready color television will not be used for a long period of time, for instance, when you go on vacation.

DO NOT

Do not clean your screen or cabinet with strong cleaners, polishes, or chemically treated cloth.

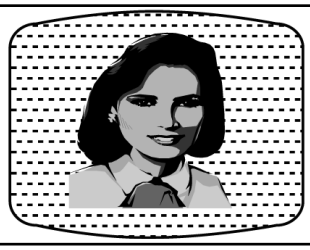
Do not place rubber or vinyl products or cellophane tape on your set.

Do not touch the screen too often.

Do not subject the remote control to shocks such as dropping it on the floor, etc. Physical damage to the precision parts may result.

Avoid placing the remote control in a high humidity place or getting it wet. Do not leave it on or near a heater. Excessive heat or moisture may cause the unit to cease operation.

When the batteries run down, remote control operation will become erratic or possibly stop altogether. Replace one old battery with one new AA size battery.

	¥ IGNITION NOISE: Black spots or horizontal streaks may appear, picture may flutter or drift. Usually caused by interference from automobile ignition systems, neon lamps, electrical drills, and other electrical appliances.
	¥ GHOSTS: Ghosts are caused by the PC ready color television signal following two paths. One is the direct path and the other is reflected from tall buildings, hills or some other objects. Changing the direction or position of the antenna may improve reception. Ghosting may also be caused by defects in the antenna system such as unshielded leads or connecting several sets to the same antenna without using multiple antenna couplers.
	¥ SNOW: If your receiver is located in the fringe area of a television station where the signal is weak, your picture may be marred by the appearance of small dots. When the signal is extremely weak, it may be necessary to install a special antenna to improve the picture.
	¥ RADIO FREQUENCY INTERFERENCE: The interference produces moving ripples or diagonal streaks, and in some cases, causes loss of contrast in the picture.

SYMPTOMS	CHECK THESE ITEMS AND TRY THESE ADJUSTMENTS	Be sure external connection is correct	Be sure power cord is plugged in	Be sure PC ready color TV is switched ON	Try another channel (station trouble)	Check antenna connections (back of PC color ready TV)	Check antenna for broken lead-in wire	Check outside antenna	Check for local interference	Adjust Contrast control	Adjust Brightness control	Adjust Color control	Adjust Tint control	Adjust Volume control
No picture, no sound	●	●	●	●	●	●	●							
Sound OK, picture poor	●			●	●	●	●	●	●	●				
Picture OK, sound poor	●			●	●	●	●	●						●
Picture blurred	●			●	●	●	●	●						
Lines or streaks in picture				●	●	●	●	●						
Poor reception on some channels				●	●	●	●	●						
No color	●			●	●	●	●				●			
Poor color	●			●	●	●	●				●	●		

This PC ready Color Television incorporates advanced power surge protection technology designed to protect against component or circuit damage due to internal voltage or power surges.

IF YOUR SET SHOULD APPEAR TO HAVE A LOSS OF POWER, PLEASE FOLLOW THIS PROCEDURE:

1) Press the power switch (ON/OFF switch) once.
2) If there is still no power, wait 30 seconds and press the power switch again.
3) If there is still no power, unplug the power cord from the wall. Wait thirty seconds and plug the power cord back in. Press the power switch again.

This protective technology should provide for years of lasting entertainment from your HITACHI PC ready Color Television.

TV Features:
- ¥ 600 Line Horizontal Resolution Superfine Picture Quality.
- ¥ All Time Progressive Scanning (480P)
- ¥ Full 1080 I HDTV Capable with Set-Top Box
- ¥ ULTRABLACK Digital Pitch INVAR MASK Picture Tube
- ¥ Dynamic Focus
- ¥ Remote Control (controls many brands of VCR s, Cable Boxes, and Satellites. Genius MMV Universal Remote.
- ¥ ULTRATEC On-Screen Display. (Tri-Lingual Bit Map OSD).
- ¥ Full Set of Input Jacks, including S-Video.
- ¥ Variable Audio Output Jacks.
- ¥ Closed Caption Decoder.
- ¥ Comb Filter, Wide-Band Video and Temperature Controls.
- ¥ MTS (Multi-Channel Television Sound) Stereo Broadcast Reception.
- ¥ 10 Watts Front Firing Speaker System.
- ¥ SRS (●) technology.
- ¥ BBE technology.
- ¥ PinPC Function (Picture-in-PC)
- ¥ Improved Auto Link.
- ¥ Flex Converter Technology

PC Features:
- ¥ VGA (640x480) Computer Resolution and SVGA (800x600) Computer Resolution.
- ¥ Scanning Frequency 31.5kHz and 37.8kHz.
- ¥ Refresh Rate 60Hz and 70Hz.
- ¥ Screen Size and Placement Adjustments.
- ¥ PS/2 Mouse Output.
- ¥ PC Audio Input Jacks.
- ¥ Plug & Play - This monitor is VESA DDC2B compliant when used with a computer compliant with VESA DDC (Display Data Channel). See page 68.

Screen Size: 36V (36 inches measured diagonally).

Inputs:
- ¥ Power Input . . . . . .AC 120V, 60Hz
- ¥ Power Consumption 180W
- ¥ Power Consumption (maximum) 240W

- ¥ Antenna input impedance . . . . . .75 Ohm
- ¥ Channel coverage . . . . . .181 ch.
- ¥ VHF-Band . . . . . .2 ~ 13
- ¥ UHF-Band . . . . . .14 ~ 69
- ¥ CATV Mid Band . . . . . .A-5 ~ A-1

- ¥ Super Band . . . . . .J-W
- ¥ Hyper Band . . . . . .W+1 - W+28
- ¥ Ultra Band . . . . . .W+29 - W+84

- ¥ Video input . . . . . .1.0Vp-p, 75 Ohm
- ¥ S-Video input
  Luminance (Y) . . . . . .1.0Vp-p, 75 Ohm
  Chrominance (C_B, C_R) . . . . . .0.286Vp-p, 75 Ohm
- ¥ Audio input level (average) . .400mVrms, 47K Ohm

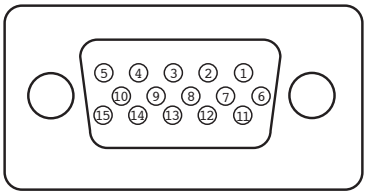
Outputs:
- ¥ Audio Output (variable) . . . . . .400mVrms, 1K Ohm
- ¥ Video Output . . . . . .1.0Vp-p, 75 Ohm

Dimensions:
- ¥ Height (in.) $29^{17}/_{32}$ in.
- ¥ Width (in.) 35 in.
- ¥ Depth (in.) $24^{13}/_{32}$ in.
- ¥ Weight (lbs.) 164 lbs.

VGA and SVGA SPECIFICATIONS

TYPE		VGA1/ PS2-1	VGA2/ PS2-2	SVGA/ PS2-3
MODE		640x480	640x480	800x600
HORIZONTAL FREQUENCY		31.469Khz	37.861Khz	37.879Khz
VERTICAL FREQUENCY		60.00Hz	72.809Hz	60.317Hz
SYNC TYPE		H/V separate	H/V separate	H/V separate
SYNC POLARITY	H	TTL:negative	TTL:negative	TTL:positive
	V	TTL:negative	TTL:negative	TTL:positive

D-Sub Mini 15-Pin Connector Pin Assignments



PIN NO.	SIGNAL	PIN NO.	SIGNAL
1	Red Video	9	No Connection
2	Green Video	10	Ground
3	Blue Video	11	No Connection
4	Ground	12	No Connection
5	Ground	13	H-Sync (or H/V sync)
6	Red Ground	14	V-Sync
7	Green Ground	15	Ground
8	Blue Ground		

NOTE: Due to improvements, specifications in this operating guide are subject to change without notice.

HITACHI

service hotline

To locate an authorized HITACHI service facility in the continental U.S.A. and Canada,

DIAL TOLL FREE

7 days a week, 24 hours a day

800 HITACHI

(1-800-448-2244)

Hitachi Home Electronics (America), Inc.

Hitachi has made every effort to assure you hours of trouble free operation from your unit. However, should you require service, a network of Hitachi Authorized Service Facilities has been established in all 50 states and Puerto Rico. Each facility will provide you with convenient and expedient assistance. Our service hotline operator will direct you to the Hitachi Authorized Service Facility nearest you. Just present proof of purchase and/or delivery receipts to the Hitachi Authorized Service Facility, and service will be rendered in accordance with the terms of the limited warranty as stated on your warranty card or operating guide.

Should you have any questions regarding warranty, service, operation or technical assistance, please contact:

Hitachi Home Electronics (America), Inc.
1855 Dornoch Court
San Ysidro, CA. 92173

<u>For TVs purchased in Canada only</u>, please contact one of the Hitachi offices below, should you have any questions regarding service, operation, or technical assistance.

MONTREAL
9425 Trans Canada
Saint-Laurent, Quebec
H4S 1V3

Tel: (514) 956-9882
Fax: (514) 956-9761

TORONTO
6740 Campobello Road
Mississauga, Ontario
L5N 2L8

Tel: (905) 821-4545
Fax: (905) 826-6627

VANCOUVER
20800 Westminster Hwy., Unit 1103
Richmond, B.C.
V6V 2W3

Tel: (604) 214-0777
Fax: (604) 214-0772

As the digital era dawns, Hitachi has models that provide the best possible images today....and tomorrow. Our HDTV-Ready SDX model incorporates new Flex Converter technology to display a high quality 480 P (progressive scanning) image; this same circuitry enables it to accept a full 1080 I HDTV signal from a digital set-top box now or in the future. The SDX model also has a S-VGA input for 800x600 resolution from a computer.

FLEX CONVERTER TECHNOLOGY

With current analog broadcasts, there is just one level of picture quality. In the new age of digital TV, there will be several levels. The highest, called HDTV, can be as high as 1080 I. The standard level, SDTV, can be 480 P or 480 I. Hitachi has developed the Flex Converter, advance circuitry that allows your UltraVision SDX series television to produce true 1080 I HDTV resolution with an HDTV set-top box, it also converts analog 480 I signals to the higher-quality 480 P signals with no scan lines or flicker. SDX needs a set-top box to receive any Digital Signal.

COMPONENT VIDEO

A component Video input accepts separate blue, red & B/W signals from a high resolution digital source as DVD or digital set-top box to provide a higher resolution picture.

3DYC (DIGITAL 3DYC COMB FILTER)

The Digital 3DYC Comb Filter analyzes three lines of information from a single video frame as well as lines from adjacent frames. This technology eliminates the flickering that a detailed pattern or scene would normally cause, for the cleanest, neatest picture possible.

PIPC (PICTURE-IN-PC)

On our 36 SDX model, Picture-in-PC allows you to display images from our computer in the main TV picture, while displaying video (from your antenna or video inputs) in the sub-picture. You can even choose to listen to the sound from the sub-picture.

SRS 3D SURROUND

SRS is a truly dynamic Sound Retrieval System that works whether the signal you receive is stereo or surround encoded. Its genius is that it creates a three-dimensional sound image from only the front speakers by retrieving the spatial information from recordings. The effect is similar to that of a live performance.

BBE HIGH DEFINITION SOUND

BBE professional systems are used in broadcasting, television and recording studios all over the world and by many of the world s most famous musicians in their concerts to achieve the best possible sound. BBE provides a rich and exciting presence, clarity and detail to music. Speech is clearer and more intelligible at lower volume. BBE is a boon to those with hearing problems or for those who enjoy old movies or TV shows. Sound from TV, and even stereo, speakers can sound muddled because certain dynamics of the original recording can be lost. BBE circuitry recreates the clear midrange sounds and crisp highs of the original recording for your enjoyment.

PROGRESSIVE SCANNING

A standard TV uses Interlaced Scanning where each frame of video is broken into two fields, each providing alternating scan lines. This can leave noticeable scan lines and cause flickering. With Progressive Scanning, complete frames are displayed for a smoother picture with no scan lines and no flicker. This allows you to get the optimal picture quality from today s high resolution digital sources such as DVD, a digital set-top box, or with a VGA input, a computer.

ULTRABLACK DIGITAL PITCH PICTURE TUBE

A standard 36 tube has a 1.0 mm dot pitch. The smaller the dots, the sharper the picture. Our 36 SDX model utilizes the UltraBlack Digital Pitch Invar Picture Tube with an ultrafine .78 mm dot pitch, a contributing factor to make HDTV-Ready.

DDC2B PROTOCOL SUPPORT

In order for a computer to recognize a monitor it must have DDC2B support, which you ll find in our 36 SDX model. This allows the computer to recognize the resolution capability of that monitor and then automatically set itself to that level without manual adjustments.

NOTES:

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